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ABSTRACT

A study analyzed the role of state governments in implementing federal education and job training policies and in designing and implementing their own policies. A framework was developed for understanding policy instruments used to promote education and training objectives: mandates, inducements, capacity-building, and system-changing. Each type embodied a different set of assumptions about (1) the policy problem to be addressed; (2) policy targets and expected effects; and (3) costs and who bears them. The framework provided an overview of the five major domains of education and training policy and distinguished areas in which implementation had shown the policies' underlying assumptions to be valid from those in which problems suggested a mismatch. The five policy domains--secondary vocational education, postsecondary vocational education, Job Training Partnership Act programs, state-funded job training programs linked to economic development strategies, and welfare-to-work programs--were based on inducements. They varied in types of secondary instruments combined with inducements, role of different levels of government, focus, and extent to which implementation was shaped by other policies. Policy design showed four trends: (1) more complex policy instruments over time; (2) a shift in balance between federal and state policy initiatives; (3) proliferation of education and training programs; and (4) assumption of new responsibilities by existing institutions. (71 references) (YLB)

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EDUCATION AND TRAINING FOR WORK: THE POLICY INSTRUMENTS AND THE INSTITUTIONS

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PREFACE

This report was prepared as part of a continuing effort by the National Center for Research in Vocational Education (NCRVE) to understand the larger institutional and policy context in which vocational education operates. It provides an overview of five major categories of education and training policies, within a framework based on the policy instruments federal and state officials use in designing programs to prepare individuals for employment. This study should be of particular interest to those in the federal, state, and local policy communities who are concerned about education and training issues, and those who manage an increasingly complex array of programs designed for different clients and operating in a variety of local labor markets.

SUMMARY

Over the past thirty years, the institutions that educate and train for employment and the policies that drive those institutions have expanded greatly and have become increasingly complex. High schools still provide vocational education, but they have been joined by adult schools and area vocational-technical schools, which cater to both secondary and postsecondary students; by community colleges, which became predominantly vocational institutions during their tremendous expansion in the 1960s and 1970s; and by increasing numbers of technical institutes and colleges. Outside the formal schooling system, programs funded by the federal Job Training Partnership Act (JTPA) provide short-term job training to various categories of disadvantaged and at-risk individuals, and states have also established their own training programs to promote economic development. Another set of programs provides job training to welfare recipients, as part of recent welfare-to-work initiatives. Finally, many job training and welfare-related programs are provided by community-based organizations, trade unions, private firms, and other institutions that received no public funds three decades ago.

Just as the institutions that provide work-related education have grown in number and complexity, so have the policies that support and regulate those institutions. The federal government and the fifty states are using an increasingly diversified portfolio of strategies to promote goals ranging from economic development and welfare reform to the strengthening of academic education. These policies, all of which influence work-related education, not only target different types of individuals, they are also intended to change the behavior of private sector firms and public agencies.

This report represents an initial effort to understand the complex education and job training system and the policy instruments (i.e., the funding and regulatory mechanisms) that drive it. The analysis focuses on the role of state governments in implementing federal policies in local communities, and in designing and implementing their own policies. Its major purpose is to provide a conceptual framework for understanding the different types of policy instruments used to promote education and training objectives, and the factors influencing how policies embodying different instruments are likely to be implemented in different local communities. Five education and training policy areas are examined: secondary vocational education, postsecondary vocational education, JTPA programs, state-funded job training programs linked to economic development strategies, and welfare-to-work programs. Data from a fifty-state survey of work-related education and training policies and case studies of education and training institutions in eight local communities are presented to illustrate the range of instruments used in each of the five policy areas.

THE INSTRUMENTS OF EDUCATION AND TRAINING POLICY

Although the work-related education and training system can be analyzed from a variety of perspectives, we have chosen to use a policy instruments framework, for several reasons: Such a framework provides a systematic approach for comparing programs and identifying important similarities and differences, and it also reveals why some policies are not implemented in ways that are consistent with their designers' initial expectations and why

policymakers respond to this "slippage" in particular ways. In addition, an instruments framework helps to explain why the entire policy system has evolved as it has and provides insights into the range of future design choices available to policymakers.

The framework includes four generic classes of instruments:

- *Mandates:* rules imposed by higher levels of government that constrain the actions of individuals and institutions and are intended to produce compliance.
- *Inducements:* the transfer of money from one governmental level to another in return for certain actions.
- *Capacity-building:* the transfer of money for the purpose of longer-term investment in material, intellectual, or human resources.
- *System-changing:* the transfer of official authority among individuals and agencies to alter the array of institutions that deliver public goods and services.

Not only do these instruments rely on different mechanisms to achieve their purposes, they also make very different assumptions about which policy problems should be addressed, who the policy targets should be and how their behavior should change, how much programs should cost, and who should bear those costs. The extent to which different policy instruments operate as expected and produce their intended effects depends largely on how well instruments, policy problems, and targets are matched.

DESIGNING AND IMPLEMENTING EDUCATION AND TRAINING POLICIES

The five types of policies we examined share a key similarity: All are based on inducements, i.e., a higher level of government provides fiscal resources to lower levels in the expectation that they will deliver education and training services to specified groups. In addressing the problems associated with preparing individuals for the workforce, policymakers have recognized the limits of mandates, particularly in a federalist system where authority and power are shared among governmental levels. They have also acknowledged the need to encourage variation by designing education and training programs that can be adapted to meet the needs of different client populations and labor markets. As a result, education and training policy is dominated by the use of inducements. However, the potential for slippage between policymakers' expectations and local implementation outcomes is very high, precisely because of the opportunity for variation. Inducement-based policies, therefore, present a fundamental dilemma for policymakers: It is necessary to promote the flexibility necessary for responsive local programs, but the slippage that can result in diverted priorities and inefficient performance must be minimized. Policymakers typically approach this dilemma by including secondary instruments, usually mandates, which set funding conditions and seek to ensure more precise adherence to targeting, service, or outcome standards.

Despite their use of fundamentally similar primary policy instruments, the five policy areas are in fact quite diverse. First, they vary in the types of secondary instruments they combine with inducements. The federal vocational education program emphasizes capacity-building, in addition to providing inducements for states and localities to serve certain target groups. Some state-funded job training programs use system-changing instruments to allow organizations outside the public education and training system to provide training. In their acknowledgment that longer-term investments in education and training are necessary to

move welfare recipients into employment, welfare-to-work programs use capacity-building instruments. This policy area also relies on mandates, requiring certain categories of recipients to participate in welfare-to-work programs. However, inadequate funding and the inability to serve all those covered by the requirements have limited the scope of these mandates.

The role of different levels of government also varies with each policy. In JTPA programs, the federal government is the sole funder and definer of outcomes, but localities largely determine what services are provided and who provides them. In training programs for economic development, the state is the dominant funder, but recipients determine program services, providers, and outcomes. Under welfare-to-work policies, costs and programmatic influence are more equally shared by the federal government and states, although policy components vary considerably from state to state. In secondary and postsecondary vocational education, the federal government is the junior partner in funding and has only moderate influence over the targeting of its funds. It also exerts little influence over decisions about providers, the nature of services, or program outcomes. The balance of control between states and local institutions over these latter decisions differs significantly across states and between the secondary and postsecondary levels.

The designers of some policies care most about who the targets are, while others are more concerned about the nature of services. Some policies emphasize the level and type of outcomes. For example, federal vocational education policy over the past twenty years has focused primarily on the issue of who should be served, while JTPA has emphasized both who should be served and what outcomes should be produced. Design choices may also change as problems are redefined and experience with a particular policy suggests the need for modification. In the recent reauthorization of the Perkins Act, Congress added a focus on services and outcomes to its traditional concern about who should be served. As a result, integration of academic and vocational education and indicators of program performance have emerged as important components of the legislation, along with targeting requirements.

Policies also differ in the extent to which their implementation is shaped by other policies. For example, since the inception of JTPA, its operations have been only modestly influenced by other policies. But with the advent of the federal Job Opportunities and Basic Skills (JOBS) program and a more activist state role in welfare reform, some JTPA programs now find their client base and service array heavily influenced by the welfare program. Secondary vocational education, after years of operating in parallel with academic education, now finds itself reshaped by policies aimed at reforming the quality of the general education system.

TRENDS IN POLICY DESIGN

The design of education and training policies has been marked by four trends. First, policy instruments have become more complex over time, with policymakers moving to more powerful instruments such as performance standards as problems have arisen and slippage from original goals has reached unacceptable levels. Second, the balance between federal and state policy initiatives has shifted. Since the 1960s, the most important policy innovations in work-related education and training have come from Washington. Over the past decade, however, the states have assumed a greater role in creating their own programs, in interpreting federal regulations, and in shaping local programs. A third major trend is the

proliferation of education and training programs. Policymakers have typically established new programs either because they felt existing ones were not performing as they initially intended, or in response to the needs of client groups that had been unserved or inadequately served by earlier programs.

The fourth trend is, in a sense, a counterbalance to the proliferation of policy. Although the number of education and training programs has increased, evidence from our eight community case studies indicates that new programs have not resulted in a similar proliferation of local education and training institutions. Rather, existing institutions typically assume new responsibilities, and where feasible, they integrate services across programs (e.g., welfare-to-work clients may attend occupational training classes with traditional vocational education students in a community college).

Future generations of education and training policies are not likely to differ significantly from the current array. They will essentially rely on inducements to promote the policy objectives of higher levels of government in local communities, but they are also likely to encompass a broader range of secondary instruments. Policymakers, particularly at the state level, will continue to focus on which services should be provided and who should provide them.

The growing emphasis on accountability in all aspects of American life, from the on-time departures of airlines to hospital mortality rates, is likely to make performance standards an increasingly prominent feature of education and training policies. However, experience with the JTPA performance standards indicates that a mandate requiring prescribed outcomes does not necessarily ensure that the desired target groups will be served or that goals of overall service quality and appropriateness will be met. As a result, the challenge for future policy design will not be to craft a single instrument to eliminate slippage on a few narrowly defined measures such as program cost and short-term job placement. Rather, it will be to combine a variety of instruments in ways that create incentives for local education and training institutions to advance the multiple goals associated with preparing individuals for productive employment—including widespread accessibility of services and the acquisition of skills that enhance long-term job opportunities.

ACKNOWLEDGMENTS

No matter how rigorous or comprehensive an analytical framework may be, the insights it generates depend on the quality of the data that give the framework life. We are grateful to a group of research assistants who completed the time-consuming and challenging task of collecting telephone and field interview data on the fifty states and eight local communities that formed the core of our analysis: Elizabeth Alpert, Steven Klein, John Lederer, Carol Maga, and Lorna Strobel, of the University of California, Berkeley; and Susan Bell, Margaret Bitzinger, Thomas Buffett, Patricia Damiano, Joan DaVanzo, Anne Johansen, Stephanie Martin, Jennifer Pascal, and Kathy Rosenblatt, of RAND. Marilyn Gerbi and Lawrence Picus were responsible for designing and organizing the database that enabled us to analyze over 800 interviews conveniently and systematically.

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Despite all the assistance we received, however, we take full responsibility for the analysis and conclusions reported here.

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GLOSSARY

ABE	Adult Basic Education
AFDC	Aid to Families with Dependent Children
AVTS	Area Vocational Technical School
BSSC	Bay State Skills Corporation (Massachusetts)
CBO	Community-based organization
CETA	Comprehensive Employment and Training Act
CWEP	Community Work Experience Program
ESL	English as a Second Language
ETP	Employment Training Panel (California)
FTE	Full-time equivalent
GAIN	Greater Avenues for Independence (California)
GED	General Equivalency Diploma
GPA	Grade point average
HHS	U.S. Department of Health and Human Services
JOBS	Job Opportunities and Basic Skills
JTPA	Job Training Partnership Act
MDTA	Manpower Development Training Act of 1962
NAVE	National Assessment of Vocational Education
NCRVE	National Center for Research in Vocational Education
OJT	On-the-job training
PIC	Private Industry Council
PSAV	Postsecondary adult vocational (Florida)
PSV	Postsecondary vocational (Florida)
ROC/P	Regional Occupational Centers and Programs (California)
SDA	Service delivery area
VEA	Vocational Education Act of 1963
WIN	Work Incentive program

I. INTRODUCTION

BACKGROUND

The myth of a simpler past is sometimes true. Just three decades ago, work-related education and training was uncomplicated and small in scope. High schools provided some vocational education, but only about one-fifth of the students were enrolled in any kind of vocational classes, and those classes were widely regarded as peripheral (Levitan and Mangum, 1969). Community colleges offered some vocational courses, but despite decades of effort by reformers to convert the community colleges into vocational institutions, nearly all the students were enrolled in transfer programs. Although a few states sponsored technical institutes, in place of or alongside community colleges, no other public institutions provided vocational education and training. The only federal support for vocational education came through the Smith-Hughes Act, which provided about $50 million. Private vocational schools existed, but most of them specialized in well-defined areas such as secretarial and office training (the dominant specialty) or cosmetology and barbering.

Over the past three decades, work-related education and training has expanded enormously and has become more institutionally complex. High schools still provide vocational education, but they have been joined by adult schools and area vocational schools, which cater to both secondary and postsecondary students; by community colleges, which became predominantly vocational institutions during their tremendous expansion in the 1960s and 1970s; and by increasing numbers of technical institutes and colleges. Outside the schooling system, programs funded by the federal Job Training Partnership Act (JTPA) provide short-term job training to disadvantaged and at-risk individuals, and states have established their own training programs. Other programs provide job training to welfare recipients, as part of recent welfare-to-work initiatives to find employment for these individuals. Many job training and welfare-related programs are provided by community-based organizations (CBOs), trade unions, private firms, and other institutions that received no public funds thirty years ago. Finally, private vocational schools have by all accounts expanded significantly and have come into the public realm indirectly because of the substantial amounts of student aid they receive. A complex system has evolved in a relatively short time.[1]

This system has two important characteristics: First, it is designed largely to provide training for occupations not requiring a baccalaureate degree, ranging from relatively low-skilled jobs in the service sector to highly skilled positions in health care and manufacturing, from jobs paying minimum wage or less to jobs paying several times the national average.

Second, this system is almost entirely a creature of public policy. Although U.S. employers are estimated to spend about $30 billion per year on formal training for their work-

[1]Because "system" implies an interactive relationship among entities that together form a unified whole, we use the term advisedly in describing the current array of work-related education and training programs. As our analysis and those of others indicate, there is no single, integrated system for work-related training. Policymakers, particularly at the federal level, have often created new programs and institutions with little consideration of how they will relate to existing ones. At the same time, individual policies and institutions that provide education and training are not entirely independent of one another. Some serve similar clients and provide similar types of services. And in many local communities, education and training institutions coordinate activities among themselves and establish a coherent division of labor—thus creating a system of their own. Here, we use the term "system" to refer to the entire configuration of education and training policies and instruments, and we explore the notion in detail in an accompanying volume (Grubb and McDonnell, 1991).

ers,[2] the public system spends roughly twice that amount and is the major source of work-related training for those who do not attend four-year colleges. The public system is a primary vehicle for obtaining entry-level job skills, and it is becoming an increasingly important source of training to upgrade skills.

The growth of the education and training system is also partly attributable to public policy. Federal policymakers have typically established new programs because they felt existing ones were not performing as they initially intended or in response to the needs of client groups that had been unserved or inadequately served by earlier programs.

As the system has expanded, the instruments of public policy—the funding and regulatory mechanisms that different governmental levels use to shape and support training activities—have also become more varied and complex. In the simpler world of 1960, local school districts funded vocational education just as they funded any other educational program, with some state aid but relatively little state regulation; similarly, the small amounts of federal aid came without the complex restrictions that now accompany funds provided through the Carl Perkins Act. Postsecondary vocational education (what little existed) was primarily funded and governed locally, with little state regulation and almost no federal presence. Now, however, many different government funding streams exist, and each comes with its own set of regulations designed to mold local programs, to designate the types of institutions that can provide education and training, to delimit the kinds of services that can be provided, and to target efforts toward specific beneficiaries.

With the expansion and diversity of the education and training system, the balance of governmental involvement has shifted. Three decades ago, vocational education was largely the responsibility of local government. Although the federal government had provided some revenue since 1917, initially as an incentive to expand vocational education, the amount was small and the effects on local programs negligible. The federal contribution has remained a small proportion of the total cost of work-related education and training, but as the federal government expanded its own programs and more precisely targeted aid, it shaped state policy and local service delivery. Most of the important initiatives of the 1960s—the enactment of manpower training programs, the initiation of welfare-related programs, and the expansion and attempted redirection of vocational education in the Vocational Education Act of 1963 and its 1968 amendments—were federal efforts, so initial changes in the education and training system were largely due to federal policies. Recently, however, states have assumed a greater role. State influence over all elementary, secondary, and postsecondary education has increased; federal legislation has prescribed expanded roles for state governments in implementing federal programs; and, partly because of a diminished federal presence in education and training during the 1980s, many states have initiated policies on their own (especially in job training for economic development). The rise of states as independent policy actors complicates the system enormously because it means that there are fifty versions to consider; but it also creates a much richer set of programs, with more variation in the policy

[2]It is difficult to compare the total amounts spent by the private and public sectors on work-related education and training because of problems in defining what constitutes such training and because of the myriad programs and funding sources in the public sector. However, Carnevale and Gainer (1988) estimate that employers spend about $30 billion a year for formal training, about $2 billion of which is purchased from public schools, community colleges, technical institutes, and CBOs—the same institutions that deliver education and training in the publicly funded system. The federal government, states, and localities spend an estimated $50 billion to $60 billion per year on education and training in secondary schools, community colleges, and technical institutes and through such programs as JTPA and welfare-to-work (based on information from Carnevale and Gainer, 1988; Goodwin, 1989; and U.S. General Accounting Office (GAO), 1989).

instruments used, and it potentially provides more information about the effects of different instruments.[3]

STUDY PURPOSE AND METHODS

This report represents an initial effort to understand this expanded education and job training system and the policy instruments that drive it.[4] Its major focus is the role of state governments in implementing federal policies in local communities and in designing and implementing their own education and training policies. The report presents a framework for understanding the design and implementation of individual education and training policies and for making systematic comparisons across policies.

The larger research project of which this report is a part addresses four basic questions:

- What is the range of policy strategies that the federal government and states currently use to provide work-related education and training, and how do those strategies differ across states and target populations?
- What are the major features of each of these strategies—who are the primary recipients, how much do the programs cost, and how are services delivered?
- Which institutions provide publicly funded education and training in different types of local communities, and to what extent do these institutions coordinate their activities or establish a division of labor?
- How consistent is local institutions' implementation of federal and state policies with policymakers' initial expectations?

The first two questions deal with the federal and state policies that drive the education and training system, and the second two focus on the local institutions that must implement those policies.

We collected a variety of data to address these questions. To provide answers to the first two questions, we conducted a survey of work-related education and training policies in the fifty states. Between January and December 1990, telephone interviews were conducted with fifteen to twenty program administrators and members of legislative and gubernatorial staffs in each state. The interviews focused on five areas: secondary vocational education, postsecondary vocational education, JTPA programs, state-funded job training programs linked to economic development strategies, and welfare-to-work programs. These five areas encompass most of the publicly funded education and training programs, with the exception of private vocational schools[5] and public vocational rehabilitation programs. We supplemented the survey data with administrative record data (e.g., program plans and evalua-

[3]Federal policies often have insufficient variation to provide information about effectiveness (except perhaps for variation in implementation); variation in state policies and in state interpretation of federal policies, however, can help provide more systematic information about effects.

[4]The term *policy instruments* is defined here as the different strategies that policymakers use to promote education and training goals through the allocation of public funds and the imposition of regulations by one governmental level on the levels below it. The range of policy instruments is described in detail in Sec. II.

[5]The major governmental policy affecting private vocational schools is the federal student aid system, which provides subsidies to students attending private vocational schools. This aid comes with very little federal regulation, and in most states, there is very little state regulation aside from an approval or registration process to enable private institutions to qualify for state and federal student aid. However, because of increases in default rates by students in private vocational schools, discussion about additional regulation has increased at both the state and federal levels.

tions, financial and other statistical compilations) collected from each of the states. An overview of these state policies and an analysis of the major ways in which they vary will be published in late 1991. (The appendix to this report describes the telephone interviews in greater detail.)

To address the last two questions, we collected more detailed information on local communities. Between July 1989 and February 1990, we visited eight communities: Fresno and San Jose, California; Jacksonville and Miami, Florida; Des Moines and Sioux City, Iowa; and Philadelphia and Scranton, Pennsylvania. There we interviewed principals, counselors, and teachers involved in secondary vocational education; administrators and instructors at community colleges and regional vocational-technical facilities; JTPA administrators and providers; welfare administrators; and a small sample of employers who either have received publicly funded job training services or are major employers of persons trained in local institutions. Our purpose was to learn how different types of local communities and labor markets organize education and training services and how they respond to federal and state policies. A companion volume, *Work-Related Education and Training in Local Communities: Diversity, Interdependence, and Effectiveness* (Grubb and McDonnell, 1991), examines each type of local institution and analyzes the linkages among them and the reasons that interaction patterns differ across local communities.

This report provides a conceptual framework for understanding the different types of policy instruments the federal government and states use in promoting their education and training objectives and for analyzing the factors that influence how policies embodying different instruments are likely to be implemented in local communities. Data from the fifty-state survey and the community case studies illustrate the range of instruments used in each of the five policy areas investigated, but no attempt is made to enumerate the incidence of different types of policies and instruments across the fifty states. Where appropriate, we also draw upon past studies of individual education and training programs.[6]

As efforts to enhance the nation's economic competitiveness through improved education and training have increased, attention has focused on the bewildering array of education and training programs. At the same time, a growing emphasis on key transition points, such as the movement of high school students into work or postsecondary education, requires that programs and institutions with diverse missions and organizational structures coordinate their efforts. By using a common framework to examine the different policy strategies that federal and state officials use to promote education and training, this report shows that although the system is varied and complex, it also has some important regularities. Because many of these regularities stem from a reliance on similar approaches to policy design and implementation, they provide a basis for identifying the key points of leverage available to policymakers in their efforts to make the system more effective and to integrate individual components.

Section II outlines our conceptual framework, describing four types of generic policy instruments, each distinguished by different definitions of the problem to be solved and different assumptions about policy targets, expected effects, and cost. This framework emphasizes the importance of policy design and the way design decisions (or nondecisions) shape the implementation and effects of programs. It also helps provide insight into how policies evolve over time. Section III applies this framework to the web of programs and institutions com-

[6]Unless otherwise noted, all the examples in this report are drawn from the state survey and community case-study data.

prising the education and training system and to their development over the past thirty years. The concluding section describes key similarities and differences across the five major policy areas and outlines the basic choices that policymakers are likely to have in designing future education and training policies.

II. THE INSTRUMENTS OF EDUCATION AND TRAINING POLICY

Assessing the full range of strategies available to policymakers requires an analytical framework that captures dimensions common to all programs. Most assessments of education and training strategies have examined a single program—vocational education, training for economic development, or welfare-to-work programs (e.g., Wirt et al., 1989; Stevens, 1986; Creticos and Sheets, 1988; Gueron, 1988). Since our purpose is to compare all these programs, we selected an analytical framework that focuses on alternative policy instruments, the mechanisms that translate substantive policy goals into concrete actions (McDonnell and Elmore, 1987; McDonnell, 1988a).

Although the work-related education and training system can be analyzed from a variety of perspectives, we chose a policy instruments framework for several reasons: It provides a systematic approach for comparing programs and identifying important similarities and differences; it also explains why some policies are not implemented in ways that are consistent with their designers' initial expectations and why policymakers respond to this "slippage" in particular ways. In addition, the instruments framework enables us to examine why the entire policy system has evolved as it has, and it provides insights into the range of future design choices available to policymakers.

The framework includes four generic classes of instruments:

- *Mandates:* rules governing the actions of individuals and agencies, intended to produce compliance.[1]
- *Inducements:* the transfer of money in return for certain actions, e.g., grants-in-aid to government agencies, private sector organizations, and individuals.
- *Capacity-building:* the transfer of money for the purpose of longer-term investment in material, intellectual, or human resources; examples include funding for training institutions to improve their planning function or the quality of their course offerings and longer-term education to impart broader skills than those required for a specific job or occupation.
- *System-changing:* the transfer of official authority among individuals and agencies to alter the system by which public goods and services are delivered; examples include vouchers, the addition of new providers such as private sector organizations, and the establishment of entirely new administrative structures to oversee training programs.

Each type of instrument embodies a different set of assumptions about (1) the policy problem to be addressed, (2) the targets of policy and expected effects, and (3) costs and who bears them. These three sets of assumptions are inherent in each type of instrument, and

[1]Because education and training policies are primarily designed to deliver services, there are few examples of pure mandates like those associated with environmental regulation, nondiscrimination requirements, or speed limits. Rather, some training programs that allocate money for essentially inducement purposes attach mandate-like conditions to its receipt. Prime examples are the performance standards imposed on agencies delivering JTPA services or the condition, imposed by some state-funded programs, that recipients of job training be appropriately placed before training institutions can be reimbursed for their services. These particular policies have an inducement as their primary instrument, but the mandate serves as a secondary instrument that reinforces the purpose of the primary one—in this case, to make service delivery more efficient.

policymakers have considerable control over them. The key assumptions for each instrument are summarized in Table 1. The context also influences the implementation history and ultimate effects of a program, but policymakers often have less flexibility in shaping it. In this section, we examine the policy problem, targets and expected effects, costs, and implementation context for each type of policy instrument. Then, because policies that have inducements as the principal instrument are central to work-related education and training, we analyze the major design decisions in the crafting of such policies.

Each kind of instrument is distinguished by the primary mechanism it uses to motivate policy action. Inducements and capacity-building both use financial resources to produce something of value or to enhance performance. The major difference between them is the time frame: Inducements focus on generating services immediately, while capacity-building is aimed at longer-term investment in the skill and ability of those responsible for governmental and private sector performance. Mandates, inducements, and capacity-building operate within existing patterns of authority and responsibility, while system-changing alters those patterns in some fundamental way. A system-changing policy, such as a voucher system, may involve the transfer of money or the imposition of rules. However, its primary

Table 1

POLICY INSTRUMENTS AND KEY ASSUMPTIONS

		Assumptions	
Instrument	Policy Problem	Costs	Policy Targets and Expected Effects
Mandates	Undesirable behavior or goods being produced. Lack of uniform standards.	Initiators: Enforcement Targets: Compliance	Have capacity to comply; most will do so, though some shirking likely.
Inducements	Valued goods or services not being produced with desired frequency.	Initiators: Direct Oversight Slippage Targets: Opportunity Matching Excess	Have capacity to produce; money will elicit performance, though variability in production levels likely.
Capacity-building	Lack of longer-term investment in needed skills and valued goods.	Initiators: Direct Oversight Slippage Targets: Opportunity Matching Excess	Currently lack capacity, but investment will mobilize it. Incentives will shift focus to longer-range goals. Payoff is less likely and longer-term than for other instruments.
System-changing	Existing institutional arrangements are not producing desired results.	Initiators: Transaction Targets: Loss of authority by established deliverers Startup costs for new entrants.	New entrants will produce desired results and will motivate established institution to improve performance. However, new entrants may generate a new set of problems.

characteristic is that it expands the range of those who can provide some publicly funded service and thereby changes the existing division of labor among institutions. Mandates, as defined above, are rules that require compliance.

THE MIX OF POLICY INSTRUMENTS

As the example of the voucher system suggests, any given policy may include multiple instruments. Policymakers typically select a dominant instrument to address a policy problem and then use others to supplement it (Elmore, 1987). For example, states typically require that all welfare recipients falling into certain categories participate in a training and employment program. The lead instrument here is a mandate with sanctions for noncompliance. However, these programs also provide inducements in the form of job search assistance, child care, and medical services. Because some of them fund educational and training services, they also function as capacity-building instruments that emphasize a longer-term investment in human capital development, rather than just the short-term goal of finding a job. A few state welfare reform programs include a system-changing provision that allows either private vendors or newly created institutions outside the traditional public job training system to deliver services.

Similarly, the dominant policy instrument that state governments use in postsecondary vocational education is an inducement, i.e., funding for particular institutions, such as community colleges, technical institutes, or area vocational schools. However, in dealing with local institutions, states may also use mandates such as program approval and student follow-up requirements. These mandates can be quite important in promoting state priorities when funding is allocated on a formula basis and state governments lack the authority over local spending that they have over categorical funding. States may also build long-term capacity by providing different types of technical assistance; and in deciding which institutions can provide which types of education and training, they may use system-changing strategies.[2] Thus, policymakers have a wide range of choices not only in the selection of a primary instrument, but also in the ways they can combine other instruments to supplement it.

Multiple instruments are often combined within a single policy, usually because the same policy is used to address different problems and to change the behavior of diverse targets. In many instances, multiple objectives cannot be pursued with a single instrument. For example, a majority of states use inducements in the form of subsidized training to attract or retain firms. A few of these states that have been particularly concerned about the efficiency or responsiveness of existing training institutions have also used a system-changing instrument to establish a new state agency, outside the traditional education and training bureaucracy, to administer the programs. In those cases, the programs have two targets—individual firms and the agencies that oversee training services—and two problems to address—economic development and bureaucratic performance. This report examines a number of policies that address multiple problems, are aimed at several targets, and rely on a combination of instruments. In some cases, the problems and the targets are defined in terms of institutions; in others, they are defined at the individual level. The key distinction

[2]For example, Florida imposes a clear division of labor between noncredit vocational programs in adult schools and credit programs in community colleges, while other states allow these institutions to offer similar programs and to compete with each other.

is not, however, whether the focus is on individuals or institutions, but rather whether a policy has multiple objectives and thus may require multiple instruments.

The extent to which different policy instruments operate as expected and produce their intended effects depends largely on how well instruments, policy problems, and targets are matched. We next discuss how our framework treats each of these factors.

THE POLICY PROBLEM

Policies are designed in a political environment shaped by policymakers' ideology and interests, constituent pressures, and a variety of fiscal and institutional constraints. Those factors lead policymakers to view some problems as more worthy of their attention than others, influence how they define the problems to be addressed, and cause them to prefer some policy instruments over others. For example, ideology or interest may prompt officials to define a policy problem as the need to provide additional services to groups inadequately served by existing programs. A different set of interests and ideology might lead other policymakers to view the problem as one of increasing U.S. competitiveness, and to consider distributional issues less important. In both cases, however, policymakers' preferences are tempered by the need to reach compromises that ensure legislative enactment and by a variety of other constraints such as the availability of resources and the competing demands of other policy areas.

Policymaking, despite its highly fluid and politicized nature, is essentially a problem-solving process. Although it is not a rational, policy-analytic excercise, even in its most ideological and politicized versions it involves an appraisal of current conditions, an assessment of why the status quo is not working as it should or of the gap between it and some desired condition, and a search for causes and potential solutions. Thus it is useful to think of the choice of policy instruments as at least partially based on different definitions of the problem to be addressed.

At one level, public policy addresses substantive problems—e.g., unemployment, low student achievement—that vary from one policy area to another. However, at the root of each specific problem lies a generic problem of the type assumed for each instrument in Table 1. If the problem is the persistence of a condition that society deems undesirable or the absence of uniform standards, then a mandate is often assumed to be the most direct and least costly policy instrument for remedying it. Such a problem definition lies behind mandatory participation in welfare-to-work programs: Long-term welfare dependency is undesirable; therefore recipients should be required to participate in programs that will mitigate the condition.

As rules that demand compliance, mandates can reduce or eliminate a negative condition, or they can minimize variation in program outcomes. However, if the goal of a policy is to produce a good that moves beyond a minimum standard or if local institutions lack the resources to assume new responsibilities, an inducement will be more effective. For example, some states have used inducements to encourage local education and training institutions to devote more attention to the assessment and remediation of their clients.

Inducements can also be used if officials define the policy problem as the need to produce a good in a variety of different forms. This definition underlies many state economic development programs. Policymakers who want to attract new firms to their states or help increase the productivity of existing ones have recognized that they cannot simply provide

generic job training and hope that it will meet a broad range of labor market and industry needs. Rather, they need to design a system that, by permitting significant variation in service delivery, can respond to the specific needs of individual firms. State economic development programs are thus characterized by adaptation to individual firm needs (as defined by the firm), flexibility about which firms are served, and variety in the type and manner of service delivery.

Some goods and services desired by society cannot be produced in the short term because the capacity to produce them is lacking. That is, institutions lack the necessary expertise or resources for such activities as long-range planning, client follow-up, dropout prevention, and curriculum development. In those cases, a capacity-building instrument is needed to address the policy problem. Policy problems for which the decision would be between inducements and capacity-building instruments are those involving the lack of a desired good. The use of inducements assumes that policy targets already have the capacity to produce the good and that it can be done quickly, given the right incentives, whereas capacity-building instruments would be appropriate if these two conditions are not present. For example, the need to develop greater capacity among welfare recipients—in the form of basic academic and occupational skills—led officials in some states, and more recently in the federal government, to design welfare policies that extend considerably beyond the scope of earlier welfare-to-work programs. Several states have funded postsecondary vocational education guidance and counseling services, student tracking mechanisms, and student follow-up systems, all intended to bolster the capacity of community colleges and technical institutes to provide appropriate and coherent vocational programs.

In some cases, policymakers assume that a problem cannot be addressed effectively by more stringent rules or more money alone. Where organizational norms and structures result in chronic unresponsiveness and inefficiency, policymakers may decide that a system-changing instrument is necessary. Such instruments are often used as a "last resort" for problems previously diagnosed as stemming from varying standards, inadequate financing, or insufficient organizational capacity. Only after these instruments have failed do policymakers typically decide that the problem they are trying to address stems from other causes. We have already identified the quasi-independent agencies administering state economic development programs as system-changing instruments. The establishment of manpower programs in the 1960s and the introduction of area vocational schools in the 1970s are also the results of system-changing policies.

The match between the definition of a policy problem and the instrument chosen may help explain the extent to which education and training programs produce their intended effects. Assumptions about the nature of the policy problem suggest three possible explanations for disjunctures among policymakers' initial expectations, local implementation outcomes, and policy effects.

First, policy design is often hampered by analysts' and policymakers' inability to diagnose a problem correctly: A problem that appears to stem from inadequate incentives may actually be caused by a lack of capacity; or a seeming need for more stringent or uniform performance standards may actually mask deep-rooted institutional problems that only a wholesale change in organizational structures can remedy. The inability to diagnose a policy problem correctly may stem from insufficient or unreliable data, or it may be due to deeply held beliefs that shape the way policy problems are defined. An example of misdiagnosing an education and training problem was the traditional focus in postsecondary policy on encour-

aging student access. As more data have become available, it has become clear that the problem is a more difficult one of student retention and program completion (Grubb, 1989).

Second, an inappropriate match between problem definition and the instrument selected may also reduce the likelihood that policies will produce their intended effects. Policymakers often rely on instruments with a short time frame when the problem is the need to build long-term individual and institutional capacity. For example, JTPA programs tend to emphasize short-term on-the-job-training (OJT) rather than longer-term classroom-based training, and they generally slight remedial education; the common practice in earlier welfare-to-work programs was to support job search assistance, but not education and training. The reason for not choosing a capacity-building instrument is often political: Capacity-building tends to be less visible than other instruments, and its payoff is typically distant and uncertain. Therefore, politicians focused on short-term electoral incentives turn to mandates or inducements, because these instruments are more likely to produce results quickly, even if their effects are not as great or sustained as those derived from capacity-building. Another reason is fiscal: Capacity-building may be expensive as well as uncertain, particularly in comparison with short-term training or simple mandates that appear to fix a problem.

Finally, inconsistency in problem definition across policy actors and governmental levels is a particular problem in an arena as fragmented and decentralized as education and training. Inconsistency may result from disparate beliefs about what constitutes appropriate roles for different governmental levels, or from different incentive structures, constituent pressures, and operating responsibilities. One recurring example of such inconsistency is the federal government's emphasis on serving special populations and encouraging innovation, while local communities tend to focus on funding ongoing programs that serve all students.

POLICY TARGETS AND EXPECTED EFFECTS

The selection of policy targets reflects the way policymakers view the incentive structures of those whose behavior they are trying to influence. Each instrument contains assumptions about the capacities and incentives of its targets that shape responses to policy and, ultimately, the effectiveness of programs. Politicians who choose to use mandates and inducements assume that if the right incentives (either negative or positive) are offered, targets have the capacity to act in accordance with the policymakers' expectations. Use of these instruments also assumes that policymakers can obtain reliable and valid information about whether targets are performing in a way that is consistent with their expectations.

Capacity-building and system-changing instruments, on the other hand, are used in situations involving very different assumptions about targets. Their use assumes that targets lack the ability to produce what policymakers and their constituents desire, because of a shortage of skill or expertise. System-changing is the instrument of choice when the deficiency arises from inefficient or unresponsive organizations, those with bad reputations, or those with priorities different from the particular goals policymakers wish to pursue. The use of capacity-building instruments assumes that additional resources will motivate targets to invest in building or expanding their capacity. The use of system-changing instruments assumes that altering the distribution of authority and empowering new institutions will not only motivate those institutions to perform in desired ways, but will also stimulate established institutions to perform more effectively.

The match between policy instruments and targets, like the fit between instruments and policy problems, may determine whether or not education and training policies operate as intended. No instrument, however well-designed and implemented, will be entirely successful in motivating policy targets to change their behavior, since targets—either individuals in need of training, firms wanting better-trained workers, or public and private institutions providing education and training—have interests of their own. If expected effects do not materialize, the explanation may lie in the nature of the individual policy instruments and their interaction with targets. For example, mandates impose rules, but there is truth to the cliché that "rules are meant to be broken." Some policy targets will avoid compliance, comply only with the letter of the mandate, or reshape it to conform to their own preferences because their personal or organizational interests are not entirely consistent with those of the policymakers (Moe, 1984; McCubbins et al., 1987).

Similarly, inducements have intrinsic properties that are likely to cause variation in the amount and type of services provided. The use of inducements assumes that targets will produce at considerably higher than minimum levels and that above-average performance requires capitalizing on targets' differing skills and expertise. Diversity in the services delivered, then, is consistent with the assumptions underlying inducements if it does not seriously compromise policy goals or create service inequities across jurisdictions or target populations. However, significant variability usually means that a policy is not producing the effects initiators intended. The challenge for policymakers relying on inducements is to impose sufficient conditions on the receipt of funds to ensure that policy goals are not seriously thwarted, without stifling the creativity and flexibility needed to produce high-quality outcomes. For example, the Carl Perkins Act formerly provided funding for half of the *excess* costs of serving handicapped and disadvantaged students in an effort to ensure that federal funds will not be simply substituted for state and local resources. In the final part of this section, we examine in greater detail the decisions that policymakers must make in seeking to balance these two objectives through inducement-based policies.

Likewise, capacity-building and system-changing instruments have intrinsic properties that may reduce their effectiveness. In the case of capacity-building, problems may arise because the long time period these instruments require increases the uncertainty of payoffs. System-changing instruments may also require long periods of time to produce their expected effects, and they present all the problems associated with creating new institutions.

COSTS AND WHO BEARS THEM

Assumptions about the costs incurred by using different policy instruments include the level and type of costs and who pays those costs. Policy initiators make decisions about how much they wish to spend and then estimate how much targets are willing to bear. The validity of this cost calculus is then tested during the implementation process.

Policy designers need to make decisions about funding arrangements for direct fiscal costs. For example, will funds be allocated to local service providers on the basis of a formula or through competitive grants? Which governmental level will have the authority to make expenditure decisions?

Different policy instruments can impose costs in addition to the direct financial costs of a program. (The types of costs associated with each class of policy instrument are listed in Table 1.) For example, the mandatory welfare-to-work programs assume *enforcement costs* in

the form of monitoring and the imposition of sanctions on those who fail to comply. However, largely because program funding has been inadequate to serve all those covered by the mandate, many states have not assumed significant enforcement costs. Welfare recipients may not comply with the requirements because they are aware that the likelihood of sanctions being imposed is quite low.

Because most education and training policies include some form of inducement, we must examine the types of costs associated with such instruments.[3] The cost calculus for inducements is more complex than that for mandates. The governmental level initiating the policy incurs *direct service costs,* represented by the funds that are transferred to participating targets. Funding grants are typically accompanied by rules or regulations designed to ensure that money is used in a manner consistent with the policymakers' intent. Regulations then create *oversight costs* in the form of administrative expenses for monitoring. When the interests of policy initiators and targets are not consistent, a certain amount of program funds transferred through inducements may be siphoned into activities that have value primarily for targets (Gramlich, 1977). These are *slippage costs* or substitution effects that policymakers must bear. States may incur such costs if, for example, they provide special funding for educational programs that school districts would otherwise support with their own revenues, or if they fund training that firms would have paid for themselves. In some legislation, such as the Carl Perkins Act, policymakers have attempted to minimize slippage costs by imposing regulations requiring recipients to use federal money to "supplement, not supplant" local revenues.

Even though the institutional targets of inducement policies receive funding, they must also bear some costs. Perhaps the largest are the *opportunity costs* that targets incur because they produce services desired by policy initiators and therefore do not engage in other activities of importance to them or their constituents. These costs are highest when targets act opportunistically and accept funds not because the services to be provided are something they value, but because they see the grant as a source of additional funding. Opportunity costs are lowest when the priorities of initiators and targets are consistent and targets see the grant as an opportunity to do something they would like to do anyway. Among education and training institutions, community colleges have had to weigh such opportunity costs as they have diversified beyond their historical transfer function to longer-term vocational education, and more recently, to shorter-term upgrade and customized training.

Policy initiators sometimes seek to reduce the costs of inducements by requiring that targets also make a financial commitment to the enterprise through the use of *matching funds*. *Excess costs* represent the cost of producing a desired good or activity, over and above the amount of a grant. They are also the costs that targets incur if initiators decide not to continue their funding and targets want to institutionalize or expand the production of desired goods and services. Federal and state pilot projects whose services local constituents have come to expect sometimes generate costs in this form.

The challenge for policymakers in selecting any of the four instruments is twofold: (1) to estimate the costs that targets are willing to bear as precisely as possible, and (2) within those constraints, to minimize their own costs and maximize efficient use of their resources. If targets view costs differently, policymakers either will not be purchasing what they intended or will not obtain as much of it as they expected.

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[3]Since the costs associated with capacity-building instruments are very similar to those for inducements, this discussion applies equally to policies that include capacity-building.

There are many instances in which the costs that targets of education and training policies are willing to bear may not have been estimated correctly. For example, the former handicapped and disadvantaged set-asides in the Perkins Act assumed that school districts and postsecondry institutions would match those resources. However, data from the National Assessment of Vocational Education (NAVE) show that 13 percent of the Perkins funds available for the handicapped and 17 percent of those for the disadvantaged were unspent in 1986–1987 (U.S. Dept. of Education, 1988b). In this case, the federal government overestimated the amount that local entities could or would spend to provide vocational education services to those target groups. Similarly, state governments try to motivate firms to make training investments beyond what they would make without the state incentive by requiring them to match state contributions at least dollar-for-dollar. However, when states pay for services that firms would ordinarily purchase themselves, they have incorrectly calculated costs and have not used their resources efficiently.

Establishing reliable costs for capacity-building and system-changing instruments is particularly difficult. Cost calculations for capacity-building instruments are confounded by the long time horizon and the uncertainty associated with high-risk investments. For example, to what extent is remedial education (for a year or more) likely to increase the employability of welfare recipients who have typically had unsuccessful school experiences in the past? The costs of system-changing instruments are not only the financial ones associated with the startup of new institutions, but also the transaction costs that existing institutions have to bear to change their organizational norms and operating procedures to become competitive with new institutions. Part of the cost of system-changing instruments may also be political if established providers mobilize significant opposition.

THE CONTEXT FOR IMPLEMENTATION

We have described the three key characteristics inherent in each of the four instruments and, thus, in any policy relying on one or more of those instruments. The fourth characteristic, implementation context, differs in its operating assumptions, depending on the specific policy. Implementation context includes:

- The choice of the organization to implement the policy.
- Interactions with other policies and organizational functions.
- Exogenous social and economic conditions.

Choosing an Organization to Implement a Policy

Implementation researchers have long assumed that key characteristics of an implementing organization, such as its commitment to a policy's objectives, skill in utilizing available resources, decision rules, and access to outsiders, are critical in explaining implementation outcomes (e.g., Van Meter and Van Horn, 1975; Sabatier and Mazmanian, 1979, 1980; Pressman and Wildavsky, 1984). More recent work by legal scholars and policy analysts has argued that policymaking is essentially a set of choices about which institutions have a comparative advantage in pursuing different policy goals. This analytical strand assumes that policymakers can significantly shape outcomes by their selection of institutions and governmental levels to further their policy goals (see Clune, 1987, for a review).

The contextual factors of greatest significance are the goals and capacities of implementing organizations. Thus, policymakers can increase the likelihood that a policy will effectively match instrument, problem, and target by the organization they choose to implement it. When the policy targets are individuals and the instruments are mandates, inducements, or capacity-building, the choice of an implementing organization is independent of the policy instrument. For example, policymakers can decide to use any or all of these three types of instruments to move welfare recipients toward economic self-sufficiency, and can then decide whether the implementing organization should be the state-level department of social services, county welfare agencies, education and training institutions, or some combination of these.

When the policy target is an organization or the instrument a system-changing one, the choice is more constrained. Nevertheless, policymakers still have some latitude. With system-changing instruments, the decision to designate an implementing organization different from those traditionally charged with delivering training services is inherent in the nature of the instrument. However, policymakers still have a choice about whether to create a completely new implementing organization or to use an existing one that previously lacked the authority to operate in the area of interest. For example, if policymakers decide that public education institutions have not been effective or responsive, they can allow existing organizations such as CBOs or private training institutions to provide program services, or they can create an entirely new institution.

The selection of an implementing organization is a key design choice that policymakers can make. Whichever organization is selected, it will bring to the new policy an organizational philosophy, staff experience and expertise, and a track record with constituents that will shape how policy goals are translated into program operations. Policymakers are often constrained in their choice of implementing organization by resource limitations that reduce the availability of start-up funding for new organizations or by the influence of powerful constituent groups that favor particular organizations over others. Nevertheless, federal and state officials need to be sensitive to the range of organizations that could potentially implement a given policy, and they must assess both their capacity and the consistency of their norms with the expected effects of that policy.

Interactions with Other Policies and Organizational Functions

Even large, visible, and complex policies rarely exist in a vacuum, independent of other policies that can reinforce, negate, or weaken their expected effects. As policymakers have added each successive layer to the education and training system over the past thirty years, they have had to take into account its precursors and how they might reinforce or constrain the new policy's intended effects. The expansion and transformation of area vocational schools and community colleges illustrates this relationship between old policies and functions and newer ones. As the area vocational schools offered more courses for adults and community colleges moved to a greater focus on vocational training, each had to decide whether to compete directly with institutions already offering such courses or to seek a clear delineation of functions and turf through mechanisms such as articulation agreements. In some cases, the latter option was imposed by state officials; in others, state officials have not intervened and have permitted either unfettered competition or informal cooperation, depending on local inclination.

Like the choice of an implementing organization, the way a particular program interacts with other education and training policies may be largely independent of which policy instruments state officials select. Consequently, it is important for policymakers designing a new program to decide how they expect it to be coordinated (or not coordinated) with other policies. It is also important that they consider their options using a complete map of the relevant policy system—that is, an enumeration of all those past and current policies that are likely to interact with the alternatives being considered and to affect their operations and outcomes.[4]

Exogenous Social and Economic Conditions

Identifying relevant social and economic conditions and estimating their impact on particular policies are among the most difficult aspects of policy analysis. Such estimates must include likely demographic changes, downswings or upturns in either the national or regional economy, the structures of local labor markets, and even conditions outside the United States. Policymakers frequently have little direct influence over these conditions, and they may be able to take them into account only in setting expectations for particular policies. Nevertheless, such an exercise is likely to lead to more realistic expectations about the ability of policy to alter behavior.

The unemployment rate—national or regional—is a key economic factor that can significantly affect the placement rates of education and training programs. It can also shape the kinds of people who are served by those programs. For example, local JTPA program administrators understand that when unemployment is high, they have more applicants and more flexibility to choose those who can most successfully benefit from the short-term training provided. When unemployment is low, it may be easier to place JTPA clients, but program administrators have a much more difficult group to train because only the least-skilled, chronically unemployed are not already working.

Some of the growing complexity of the education and training system can be attributed to the responses of policymakers and institutional leaders to exogenous conditions. For example, area vocational schools responded to demographic changes in the 1970s by seeking a new, adult client population. The quick-start training programs begun in the South in the 1960s were viewed as a way to accelerate the industrialization of that region and make its ecomonic base more like that of the rest of the country; and the state job training programs started in the early 1980s were responses to both the short-term recession and longer-term shifts in the international economy. Yet state and local policymakers typically lack the data and staff resources to take into account any but the most general demographic and economic trends. As Fosler (1988: 315) argues, understanding the potential relationship between state policies and the broader economic and social context in which actions are taken requires knowledge in areas unfamiliar to most state governments, including market dynamics, institutions for human resource development and labor adjustment, changing technology, the evolution of regional economies, and patterns of international trade and investment. Until poli-

[4]Interaction with other policies includes not only those within the education and training system, but also those in policy areas that may impinge on it. For example, recent reforms in general education are currently constraining vocational education by reducing enrollments. However, if the new curricular emphasis on problem-solving were to stress the role of applied subjects, the effect might be just the opposite. Similarly, other state economic development policies (e.g., infrastructure assistance, low-interest loans, tax concessions, etc.) can either reinforce or constrain job training policies, depending on the extent to which they are coordinated with each other.

cymakers at all governmental levels have such information on a timely basis, education and training programs may be no more than blunt tools in efforts to respond to and influence larger socioeconomic trends.

In sum, we can think of the context in which policy is implemented as a set of variables that are largely independent of individual instruments and the assumptions underlying them, but whose interaction with different policies may be significant in explaining the ability of those policies to achieve their intended effects.

A CLOSER LOOK AT INDUCEMENTS

The generic problem that work-related education and training policies typically address is that training of a particular type or for a particular group is not being provided on the scale that policymakers consider necessary. Most education and training policies therefore include some form of inducement as the dominant instrument, often supplemented with a variety of secondary instruments. The assumptions embodied in inducements (e.g., that targets have the capacity to produce the needed services and that money will elicit performance) structure the basic design of the policy. But they also represent a starting point for decisions that policymakers and program administrators make to fine-tune a policy. This fine-tuning comes during the initial design of legislation and later through program regulations and subsequent reauthorizations.

Through their fine-tuning decisions, officials attempt to balance the diversity encouraged by inducement policies against their desire to ensure that specific targeting, service, and performance goals are met. The most common strategy for balancing these two objectives is to impose mandates as conditions for receipt of the inducement. In a smaller number of cases, policy designers also rely on capacity-building or system-changing instruments to increase performance, while still encouraging variation in the ways policy outcomes are achieved.

Fine-tuning decisions revolve around five basic issues. The first, *who should be served,* specifies policy targets through such mechanisms as eligibility requirements. The second, *who should pay,* determines the allocation of fiscal responsibility across governmental levels and agencies. The third, *what should be provided,* details the policy outputs—what kinds of education, training, and other services should be provided and over what duration. The fourth issue, *who should provide,* helps establish the context for implementation by defining which governmental and private institutions are authorized to receive the inducement and provide services. The final issue, *what outcomes should be produced,* defines a policy's expected effects and establishes the standard by which its success will be judged by politicians and their constituents.

The responses of policymakers on these issues for a given policy depend on a host of political, fiscal, and organizational factors that differ over time and jurisdiction. The choices are critical in delineating a policy's expected effects and in structuring its implementation. But not every item is equally important to all education and training policies. For example, as will be shown in Sec. III, federal vocational education policy over the past twenty years has focused primarily on the issue of who should be served, while JTPA policies have emphasized both who should be served and what should be produced.

These design choices are not immutable, and they may change as problems are redefined and experience suggests the need for modification of a policy. In fact, the evolution of

education and training policies over the past three decades reflects policymakers' decisions to accord different emphases to these five issues over the life cycle of a given policy and across the range of federal and state policies. In the recent reauthorization of the Perkins Act, Congress added services that should be provided and outcomes that should be produced to its traditional concern about who should be served. As a result, the integration of academic and vocational education and indicators of program performance have emerged as important components of the legislation, along with targeting requirements.

CONCLUSIONS

A focus on the instruments of education and training policy makes examination of a complex system more manageable in three ways. First, it provides a common framework that permits us to move beyond program-specific descriptions to compare policies and to assess how well they are operating separately and together. Second, it pinpoints the major design choices available to policymakers by showing how different combinations of instruments can be used to advance a particular goal. Examining education and training policy through an instruments framework not only details the range of instruments currently in use, but also suggests other possible combinations for future policy design. Finally, for those instances where policies have not been successfully implemented or have not produced outcomes consistent with their designers' intentions, this framework directs analysts to focus on a few factors as possible explanations—assumptions about the match between problem definition and instrument choice, the match between the instrument and policy targets, and assumptions about the cost calculus.

In the next section, we use the instruments framework to provide an analytical overview of the five major domains of work-related education and training policy and to distinguish areas in which implementation has shown the policies' underlying assumptions to be valid from those in which problems suggest some kind of mismatch.

III. DESIGNING AND IMPLEMENTING EDUCATION AND TRAINING POLICIES

The five policy domains we examine in this section have much in common. All include policies based on inducements: A higher level of government provides fiscal resources to lower levels in the expectation that they will deliver education and training services to specified groups. Because each governmental level holds only limited authority over the level below it, the potential for slippage between policymakers' expectations and local implementation is significant. Consequently, each inducement is supplemented by mandates that set funding conditions and seek to ensure a more precise level of targeting, service, or outcome standards. The strength and specificity of these mandates vary considerably across the five policies, but to the extent that they have changed for each policy, they have become more precise over time.

Despite basic similarities, the five policy areas have significant differences. For example, the roles of different levels of government vary in each domain. In JTPA programs, the federal government is the sole funder and definer of outcomes, but localities largely determine what services are provided and who provides them. In training programs for economic development, the state is the dominant funder, but recipients determine program services, providers, and outcomes. Under welfare-to-work policies, costs and programmatic influence are more equally shared by the federal government and states, although policy components vary considerably from state to state. In secondary and postsecondary vocational education, the federal government is the junior partner in funding and has only moderate influence over the targeting of its funds. It also exerts little influence over decisions about providers, the nature of services, or program outcomes. The balance of control over these decisions between states and local institutions differs significantly across states and between the secondary and postsecondary levels.

As we noted in the previous section, the designers of some policies care most about who the targets are, while others are more concerned about the nature of services; still other policies emphasize the level and type of outcomes. Policies also differ in the extent to which their implementation is shaped by other policies. For example, since JTPA's inception, its operations have been only modestly influenced by other policies. But with the advent of the federal JOBS (Job Opportunities and Basic Skills) program and a more activist state role in welfare reform, some JTPA programs now find their client base and service array heavily influenced by the welfare program. Secondary vocational education, after years of operating in parallel with academic education, is now being reshaped by policies designed to reform the quality of the general education system.

These are just a few examples of the ways in which policies created to address similar problems can vary in their design. We now examine each of the five policy domains in greater depth, focusing on their basic characteristics, the role of each governmental level in the design and implementation of the policies they embody, and the evolution of those policies over time. To provide as comprehensive an analysis as possible, we present a fairly extensive discussion of each policy area. An overview is also given in Table 2, which summarizes the major characteristics of work-related education and training policies in each area. Table 3 outlines the approaches of federal, state, and local governments to work-related education and training policy.

Table 2

MAJOR CHARACTERISTICS OF WORK-RELATED EDUCATION AND TRAINING POLICIES

Policy Area	Recipients	Funding Sources	Services Provided	Institutions Providing Services	Intended Outcomes
Secondary vocational education	Primarily non-college–bound high school students enrolled in multicourse programs; other students typically take a few courses.	State and local tax revenues; minimal federal funding.	Classroom instruction, varying from a single course to half-time programs.	High schools; area vocational schools.	Preparation for entry-level jobs.
Postsecondary vocational education	All adults eligible; most students older, of lower SES and prior school achievement than other postsecondary students.	State and local tax revenues; minimal federal funding; minimal tuition (except in proprietary vocational schools).	Classroom instruction, varying from a few courses to Associate degree programs lasting four semesters.	Community colleges, technical institutes, area vocational schools, proprietary vocational schools.	Preparation for entry-level to mid-level jobs.
Job Training Partnership Act (JTPA)	Eligibility determined by federal regulations—for the economically disadvantaged (long-term unemployed, displaced workers, at-risk youth, criminal offenders, etc.)	Federal revenues; some state revenues when programs contract with educational institutions.	Short-term (6–10 weeks) classroom training; on-the-job training; some remediation and support services.	CBOs, educational institutions, proprietary schools under contract.	Performance standards emphasize placement rates and cost per placement; most placements in entry-level jobs.
Welfare-to-work	AFDC recipients, including both mandatory and voluntary participants.	Federal revenue and matching state revenues.	Range of services possible, but remediation and job search assistance most common.	Contracts with ABE and GED programs; JTPA for skill training; CBOs for various services; and (rarely) postsecondary institutions for education.	Employment in entry-level jobs, often at or near minimum wage; reducing welfare costs.
State-funded job training for economic development	Current and prospective employees of particular firms; displaced workers.	State revenues, often matched by firm contributions.	Short-term, firm-specific job skill training, often on-the-job; retraining.	Community colleges, technical institutes, firms.	Attracting or retaining employers; for individuals, employment in specific firms.

Table 3

LEVELS OF GOVERNMENT AND THEIR APPROACHES TO EDUCATION AND TRAINING POLICIES

Policy Area	Governmental Level		
	Federal	State	Local
Secondary vocational education	Inducement policy with targeting mandates and capacity-building. Addresses problems of inadequately served groups and the need to enhance program quality. Traditional focus on who is served; recent emphasis on program services and performance standards.	Significant variation in amount of policy direction and types of policy instruments. Major leverage through funding mechanisms. Mandates such as program approval and course requirements regulate local services. Only limited attention to targeting and outcomes.	Narrow range of vocational education programs in comprehensive high schools; broader array in regional facilities. Enrollments and offerings affected by state policy, but local priorities shape role of vocational education in secondary schooling.
Postsecondary vocational education	Federal policy goals and instruments much the same as for secondary vocational education, but more limited in scope and impact. Additional federal role through student aid programs.	Less state direction than in secondary vocational education. State leverage is primarily through deciding which types of institutions can provide vocational education programs and through funding mechanisms. Capacity-building policies—e.g., to increase retention—in some states.	Except for the impact of funding formulas and levels, local institutions little affected by federal and state policies. Range of offerings expanded to include more short-term programs for a variety of clients.
Job Training Partnership Act (JTPA)	Inducement policy with targeting mandates and performance standards. Within these constraints, states and localities are given flexibility in who provides services and in the service mix. Funding only sufficient to serve a small proportion of eligible population.	Most states act as funding conduits for federal funds and do not impose additional requirements on local programs to advance state priorities. Some are beginning to use JTPA as part of broader welfare reform and economic development strategies.	Variation in providers and service mix. Which clientele served influenced by performance standards, but largely shaped by market conditions. Use of performance contracting to shift risk to providers. Costs shifted from JTPA to state and local sources by subcontracting with public education institutions.
Welfare-to-work	Combination of mandates, inducements, and capacity-building, with emphasis on expanded education, training, and support services. Service levels are defined, but there is flexibility on types of services, providers, and scope of state and local programs. Performance standards to be established by 1995.	Only a small proportion of the eligible population currently served. Increased investment in longer-term education and training, but still emphasis on job search and shorter training. Historical differences across states in service levels not likely to change. Greater efforts to coordinate services across agencies.	Local communities implementing the JOBS program through existing education and training institutions and not creating new service delivery mechanisms. In some areas, JOBS is a catalyst for establishing a clearer division of labor among local providers.
State-funded job training for economic development		Inducements, with system-changing instruments used in a few states. Most programs small, but very flexible. Primary emphasis on attracting and retaining firms; some incentives for firms to hire and train the unemployed. Most funded through legislative appropriations; a few through designated taxes or bonds.	Not a major source for local training, but helpful for economic development. Funding source for more entrepreneurial local institutions.

SECONDARY VOCATIONAL EDUCATION

The Federal Role

Federal initiatives have played a key role in expanding the population served by vocational education. In the early 1960s, vocational education was widely seen as insensitive to changing labor markets and to those most in need of training, including the unemployed and minorities. Recognizing this as a serious problem, President Kennedy appointed a commission to make recommendations for federal policy action. The commission's report, while critical of vocational education, suggested an expansion and redirection of federal support (Panel of Consultants on Vocational Education, 1963). This resulted in the creation of the Vocational Education Act (VEA) of 1963, which increased federal funding and imposed new requirements on programs to increase enrollments of people with special needs, defined as the unemployed and minorities.

The VEA also began a process of increasing constraints on the ways federal funds could be spent to further federal purposes. The 1968 Amendments included stronger requirements to enroll minorities and the unemployed in vocational education, and the 1976 Amendments added a host of new purposes, including reducing sex stereotyping, helping students with limited English proficiency, and improving access for the handicapped. The Carl Perkins Act of 1983 continued this pattern, with federal funds earmarked for five target populations—the disadvantaged, the handicapped, adults, single parents and homemakers, and criminal offenders. The Perkins Act also targeted funds for promoting sex equity and general program improvement.

In recent years, federal vocational education policy has been based on inducements operationalized through targeting mandates. Congress defined the policy problem as a lack of services being provided by states and local districts to particular groups, and it assumed that an inducement would expand services to those target populations. Although the ultimate policy targets are vocational education students, secondary and postsecondary institutions are also targets in that Congress has assumed that those institutions would change their behavior in response to the federal inducement. To increase the likelihood of such change, Congress attached targeting provisions as a condition for receiving Perkins Act funds.[1] The federal funding inducement, coupled with specific targeting mandates, reflected Congressional interest in influencing who is served in vocational education.

In addition to its concern about underserved populations, Congress also defined a problem that called for both shorter-term inducements and longer-term investment in capacity-building: the need to improve and modernize vocational education to meet existing and future workforce needs. To address this problem, 43 percent of the Basic Grant was earmarked for program improvement, innovation, and expansion. With this focus, Congress added

[1]Prior to the 1990 reauthorization of the Perkins Act, targeting provisions required that more than 50 percent of the Basic Grant be spent in economically depressed or high-unemployment areas, that state administrative costs consume no more than 7 percent of the funds, that 57 percent be spent on the six categories of traditionally underserved persons, and that funds earmarked for the handicapped (10 percent of the Basic Grant) and the disadvantaged (22 percent) be allocated within states according to a specified formula. The states, however, had considerable discretion in the distribution of the 68 percent of Perkins funds not covered by a formula.

capacity-building to its array of policy instruments and addressed the question of which services should be provided with federal vocational education funds.

The recent NAVE found the effectiveness of these federal instruments to be mixed. For example, the provision of set-aside funds for disadvantaged students meant that school districts with higher poverty rates had a greater likelihood of receiving Perkins funds and their per-student set-aside awards were higher than those of other districts. However, within local districts, NAVE was unable to identify any systematic means for distributing funds based on student or programmatic characteristics. The study also found that many districts did not know how many students were eligible for services, and some did not know how many were actually served (Muraskin, 1989). NAVE also found that the Perkins program-improvement funds were generally used in ways consistent with the goals of a capacity-building instrument, although much of the emphasis was on investment in the enhancement of vocational education facilities, rather than staff resources. In the NAVE sample of 410 school districts, 86 percent spent Perkins funds on equipment purchases, while only 32 percent spent funds on curriculum development, 28 percent spent them on staff inservice, and 27 percent spent them on student counseling and guidance (Muraskin, 1989: 112). However, in nine case studies, NAVE found that the state level retained from about 10 percent to 40 percent of the program improvement funds, and that these funds were most commonly used for curriculum development.

In the 1990 reauthorization of the Perkins Act, Congress sought to remedy the problems identified by NAVE. For example, it has given less discretion to states in how funds are allocated, and it is requiring that the majority of federal funds be distributed to local school districts and area vocational schools through a formula weighted by the number of disadvantaged and handicapped students. The legislation also specifies that within local districts, schools with the highest concentrations of at-risk students should be served first. These modifications in the targeting mandates continue the federal emphasis on the issue of who should be served.

But the reauthorization also focused on other design questions that federal vocational education policy has not stressed in the past. This shift in emphasis stems from changing definitions of the policy problems to be addressed. For example, while vocational education has always been aimed at workforce preparation, there is now increasing concern about employers being forced to hire persons who are too narrowly trained in specific vocational skills and who lack basic academic skills (U.S. House of Representatives, 1989). Consequently, the reauthorization language deals more specifically with the definition of what educational services should be provided with federal funds, and it authorizes funding for programs that integrate academic and occupational disciplines and that provide coherent sequences of course offerings across the secondary and postsecondary levels. Similarly, to emphasize the requirements concerning what should be produced with federal vocational funding, the reauthorization directs states to develop performance standards that measure students' achievement of relevant skills and their subsequent employment or educational attainment. Congress continues its reliance on inducements to influence who is served in vocational education. At the same time, expanded definitions of the policy problem by the business community and others have led Congress to move beyond its traditional emphasis on policy targets; recent legislation now specifies the nature of the services to be provided and requires that the outcomes of those services be publicly reported.

The State Role

In contrast to the federal government, states place little emphasis on vocational education policies that seek to influence who is served at the local level. This lack of attention to target populations is consistent with state governments' historic focus on policies for all students, as opposed to policies that provide compensatory services for those who have traditionally been underserved (McDonnell and McLaughlin, 1982).

Secondary vocational education policies at the state level differ from federal government policies in other ways as well. Across the fifty states, state governments deal with a broader array of policy instruments, and within the inducement category, states have concerned themselves with a wider range of design choices. States can rely on a greater variety of policy instruments because they hold more direct authority over local institutions through their constitutional authority over public education, and because the state level pays the largest portion of total education costs. Also, the context within which state vocational education policy is implemented is increasingly influenced by policies outside vocational education.

Yet just as state policies as a group differ significantly from those of the federal government, states vary at least as much among themselves in the policies they enact and implement. This variation is partly explained by differences in demographics, labor market needs, and available resources, but it is also due to differences in political culture—in particular, the historical relationship between state government and local jurisdictions and the strength of state influence over local service delivery.

One design choice that every state faces is that of who should bear the costs of vocational education: How should it be funded and what institutions should control the expenditure of those funds? In most states, secondary vocational education is funded through a general aid formula that allocates state funds to local districts on the basis of their total enrollment and a variety of other factors that typically take into consideration local wealth and student characteristics. How those funds are used for either general or vocational education is basically left to the discretion of local districts. In a few states, such as Florida, vocational education is specifically taken into account in the state aid formula through a set of weights (e.g., students enrolled in exploratory career programs are weighted at 1.273, and those in industrial programs are weighted at 1.847).

The design of state funding mechanisms has a greater impact on area vocational schools than it does on local school districts. State funding arrangements can create strong incentives that shape who is served in regional institutions and how well these institutions can adapt to changed circumstances.

One of the most far-reaching effects of the 1963 VEA was the funding of area vocational schools. Designed to produce economies of scale by providing vocational programs to students in regions larger than school districts, these provisions stimulated the development of new institutions to provide secondary vocational education. During the 1970s, secondary enrollments declined in area vocational schools, probably as a result of declining enrollments generally; and more recently, the secondary enrollments in these schools have fallen more precipitously as increased academic course requirements for high school graduation have reduced enrollments in all types of vocational courses (Clune et al., 1989). To ensure their survival, many area vocational schools began to serve adult populations, almost entirely in noncredit courses and short programs not leading to degrees; the offerings in such schools include English as a Second Language (ESL), various forms of remedial education, General Equivalency Diploma (GED) programs, and other general courses, as well as a variety of

short-term vocational courses. The result has been the creation in many states of a hybrid institution, organized as part of the secondary schooling system but independent of local school districts, and including both secondary and postsecondary students.

The ability of area vocational schools to compensate for the loss of secondary students largely depends on the way the schools are funded. California and Pennsylvania represent contrasting cases. In California, adult students enrolled in Regional Occupational Centers and Programs (ROC/Ps) are funded on the same basis as secondary students. As a result, ROC/Ps have been able to maintain stable enrollments over the past decade—as the number of secondary students has declined, the number of adults has increased. But the situation is quite different in Pennsylvania. State reimbursement for a secondary student is $1,800 per year for a three-hour course sequence. The Area Vocational Technical Schools (AVTSs) receive no state reimbursement for adults who attend during the day, and they receive $3.20 per teacher-hour for evening classes that enroll adults (i.e., $230 for a class that costs the AVTS about $864). As a result, the AVTSs must charge adults tuition ranging from several hundred dollars a year for basic courses up to several thousand for expensive programs such as respiratory therapy. Given the income level of adults who are attracted to such programs, this cost is a significant barrier to participation (although financial aid such as Pell grants can be used to cover some expenses).

Other aspects of state funding arrangements can create different incentives for local providers. For example, in California, funds for ROC/Ps go directly to the institutions that offer them, based on the number of students they enroll. In Pennsylvania, however, state funding goes to the local school districts, which must then pay the AVTSs for any of their students who attend the regional programs. As local district enrollments have fallen, individual districts have a greater incentive to discourage their students from attending the AVTSs. On the other hand, ROC/P enrollments are capped in California, so individual programs have little incentive to recruit students in excess of that cap, unless they can find funding sources to supplement the state reimbursement.

In establishing their area vocational facilities, states have dealt with the question of who should be providing vocational education. Using system-changing policy instruments, they expanded the range of institutions authorized to provide vocational education. The assumption was that regional institutions would provide more intensive vocational training for a broader range of occupations than could typically be offered in comprehensive high schools. A few states have also addressed the question of who should provide which types of vocational education by implementing policies designed to coordinate course offerings between the secondary and postsecondary levels. For example, Iowa recently enacted legislation establishing 15 regional planning boards to work with high schools and community colleges in articulating the sequence of courses across the two levels and in establishing satellite facilities where students can go for programs that are not available at their home institutions.

States have attempted to influence the types of education that will be provided through a variety of mandates. Some, such as requirements that students take particular courses or that courses include specific competencies or span a minimum number of classroom hours, apply directly to vocational education. For example, New York requires all eighth grade students to have taken an applied academics program which includes familiarity with a computer keyboard, a one-year introduction to technology, and a home and career planning unit. Iowa requires that by 1992 all vocational education programs include a minimum of three sequential units totaling 360 hours (to be offered over a maximum three-year period) and

that all schools show how vocational education courses strengthen students' academic skills through application.

A number of states regulate vocational education by requiring that all new programs be approved by either the state board of education or the state education agency. In the review process, the state typically verifies that the following criteria are met:

- There is labor market demand for program graduates.
- The program does not duplicate existing programs in the local area.
- The institution offering the program has adequate facilities and qualified instructors.
- The proposed curriculum is appropriate.

Although most states that have a program approval process report that they occasionally deny requests for new programs, their typical action is to work with localities until a proposed program can meet state standards.

Other state mandates such as academic course requirements for high school graduation or state curriculum frameworks relate to general education, but they can have profound effects on the type and amount of vocational education available to students.[2] In fact, although most states have chosen not to regulate the vocational education curriculum, 45 did modify high school graduation requirements in the 1980s, primarily by increasing the number and mix of required academic courses.[3] Although state policymakers view students leaving high school without the skills needed for the workplace as a major problem, they have chosen to address it through a mandate aimed at academic rather than vocational education (McDonnell, 1988b).

Most states have chosen not to enact policies regulating the outcomes of vocational education. About half of the states require local districts to report on the proportion of students completing vocational programs and to conduct follow-up surveys tracking whether subsequent employment or training is related to students' high school coursework. However, these data are typically not reported widely, and the follow-up surveys are often flawed because of low response rates.

Nevertheless, nine states have established policies directly linking placement rates to the distribution of funds (U.S. Congress, Office of Technology Assessment, 1989). For example, 37 percent of the state funds in Missouri that support vocational-education teachers' salaries and equipment purchases are allocated on the basis of local programs' ability to train students in high-market-demand occupations and to place them in jobs related to their training. Florida requires local programs to maintain a job placement rate of at least 70 percent of those completing training. Programs that fall below that placement rate for three

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[2]The tradeoff between increased academic course requirements and less time in the high school curriculum for vocational education courses is well-documented. But other academic policies, such as state curriculum frameworks, can also have an impact on vocational education. For example, California has shifted to a literature-based English curriculum that places less explicit emphasis on basic reading and grammar skills. This change has made it more difficult for school districts to award academic credit for vocational education courses such as Business English.

[3]As part their course requirements, four states (Maryland, Utah, Virginia, and Washington) mandate that students must take one Carnegie course unit in vocational education to graduate from high school; Florida requires one-half of a unit; and Wyoming requires four units. The other 44 states do not require high school students to take any vocational courses.

consecutive years are ineligible for state funding.[4] The Missouri and Florida examples illustrate how two states with a similar goal—improving the outcomes of vocational education—can pursue that goal using different policy instruments. Missouri relies on an inducement, allocating additional funds to those localities that perform well on state standards, while Florida uses a mandate that imposes sanctions for nonperformance, i.e., funding withdrawal. In a sense, both instruments produce similar results—localities gain or lose funding based on performance—but the assumptions about how higher levels of government can most effectively influence the behavior of localities are different for each.

Not all states are as activist as those cited in the discussion above. Largely because of long-standing traditions of nonintervention in local affairs, many states have no established policies dealing specifically with vocational education. These state governments enforce the federal funding requirements embodied in the Perkins legislation and furnish technical assistance to help local districts meet those requirements. In addition, these states may provide more substantive assistance in the form of curriculum design and staff development workshops.

Local Response and Policy Effects

At the local level, secondary vocational education represents an interesting paradox. On the one hand, the overwhelming majority of high school students take some coursework in vocational education. Data from a nationally representative sample of the high school graduating class of 1982 show that 97 percent enrolled in at least one vocational course, and half of all students took four or more vocational courses (U.S. Dept. of Education, 1988a). At the same time, most comprehensive high schools now offer a very narrow range of vocational courses, primarily limited to a few courses in business practice, home economics, trades and industry, and, in some schools, agriculture. There is also a widespread perception among vocational educators that their programs, particularly those offered in regional facilities, are disproportionately serving disadvantaged students. Some respondents in our eight-community sample even went so far as to argue that secondary vocational education had become a "dumping ground" for students whom academic programs either could not or would not serve.[5]

The current status of secondary vocational education in local communities is partly explained by state policies. State requirements for increased academic coursetaking have resulted in declining vocational education enrollments across the country. A study of curricu-

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[4]Even in Florida, with what appears to be strict regulation of vocational education outcomes, a lack of clarity in defining terms such as "program completer" and "related employment" and the need to rely until recently on local data collection have made implementation of this mandate difficult. Florida is currently attempting to move to a statewide system for tracking students who complete vocational education programs. Former students' social security numbers will be used as a link to a variety of databases, including national military records, the state's postsecondary enrollment file, and the unemployment insurance system. Once the data are collected, however, the information will be returned to local jurisdictions, which will determine whether or not student placements are in areas related to training.

[5]This perception is, to some extent, reflected in national data. A study based on a representative sample of transcripts for the high school graduating class of 1987 found that handicapped and academically disadvantaged students (those with grade point averages (GPAs) of 2.0 or less) earned a higher proportion of their total course credits in vocational education than nonhandicapped and academically advantaged students (i.e., those with GPAs of 3.0 or higher—24 percent of the total, compared with 12 percent). The handicapped and academically disadvantaged students also took more of their coursework at area vocational schools, although students in schools with the highest concentrations of poor and disadvantaged students were less likely to take courses in regional facilities and had less choice in program offerings (Wirt et al., 1989).

lar changes in Dade County (Miami), Florida, between 1982 and 1986 found that vocational education courses suffered the greatest losses in enrollment—19,000 students—and that this decline accounted for 65 percent of the increases experienced in other departments, such as science and foreign languages (Hanson, 1989). In some states, the effects of increased academic requirements have been confounded by other state policies. Pennsylvania, for example, requires that programs be offered in three-hour blocks to qualify for federal and state vocational education funding, but fewer and fewer students are able to meet the state's academic course requirements and still have sufficient time in their class schedules for the longer vocational courses. A direct effect of these state policies has been reduced student enrollments and, eventually, limited vocational course offerings.

The ways local communities have adapted to these policy changes also depend on the incentives and constraints created by other state policies. We have already mentioned differences in state funding formulas that have made it easier for regional facilities in some states to compensate for the loss of secondary students with increased adult enrollments. State policies concerning whether vocational courses qualify for academic credit to meet graduation requirements also influence the ways localities have responded. For example, soon after the Pennsylvania State Board of Education enacted Chapter 5, which increased graduation requirements, administrators in several AVTSs lobbied the state legislature to allow vocational courses to qualify for academic credit. As a result, AVTSs and some comprehensive high schools have renamed vocational courses and made slight modifications in their content to enable vocational students to meet the graduation requirements. For example, schools now offer "carpentry mathematics" and "nursing mathematics" that meet both vocational education and academic course requirements. In addition, the definition of what constitutes an arts and humanities course in some local districts has been expanded to include "Wood I," data processing, and home economics (McDonnell, 1988b). Similarly, some vocational educators in California have been able to convince their local districts that a few vocational courses, particularly in agriculture and the health occupations, can be counted as science courses for students attempting to meet the course requirements for admission to the University of California.

Despite the strong influence of state policy on the amount of vocational education taken by students and, in some cases, on the types of courses offered, purely local factors also play a key role. The way vocational education is delivered to students can be a function of district policies designed to promote goals that are only indirectly related. In our local community sample, Philadelphia has a highly regarded and extensive network of Academy programs which offer students an integrated academic and vocational curriculum along with small class sizes and guaranteed part-time jobs. However, these programs are viewed primarily as an intervention for at-risk students that includes an "occupational hook." In other words, the fact that the Academy program is a delivery mechanism for vocational education is more a function of the district's policies for assisting at-risk students than of its particular approach to delivering vocational education. Similarly, other districts, such as Fresno, California, have used vocational magnet schools as a way to meet desegregation goals.

We do not have sufficient data to answer the question of whether local communities are responding to federal and state policies in ways that are consistent with policymakers' expectations. The NAVE investigation, however, suggests that while disadvantaged students participate in more vocational education coursework than other students, the most disadvantaged have less access to a wide range of intensive programs, and these differences across students are little influenced by federal funding (Wirt et al., 1989).

We know that, in response to state policies, local schools are offering more sections of academic courses and that students are taking more of these courses (Bennett, 1988). But a study of local responses to graduation requirements in five states also found that the majority of the new sections being offered are in lower-level courses such as general mathematics (Clune et al., 1989; McDonnell, 1988b). Available evidence suggests that this substitution of lower-level academic courses for vocational courses is not what policymakers expected when they increased course requirements in an attempt to make the high school curriculum more rigorous and standardized across local communities. Initial data from our fifty-state survey of vocational education policies indicate that the widespread efforts of vocational educators to have their courses qualify for academic credit may be an interim response and that initiatives to integrate academic and vocational content will gradually enhance what has been, up to now, an exercise in relabeling courses rather than changing their content.

POSTSECONDARY VOCATIONAL EDUCATION

The Federal Role

The development of postsecondary vocational education in community colleges and technical institutes has been due more to state action—or reaction—than to federal initiatives. All levels of postsecondary education boomed during the 1960s, but enrollments at two-year institutions grew even more rapidly than those at four-year colleges,[6] and states responded by appropriating funds for continued expansion and construction of new institutions. In contrast to the significant role it played in the expansion of secondary vocational education during the 1960s and 1970s, federal policy has had virtually no effect on postsecondary vocational education, since federal legislation has included very few explicit provisions for it and federal funding has been less important at this level than it has been in secondary schools. Overall, about 40 percent of Perkins Act funds are spent at the postsecondary level[7] (Wirt et al., 1989), but these funds represent only about 5.7 percent of total revenues for vocational programs at community colleges (Goodwin, 1989).[8]

The federal role in postsecondary vocational education focuses on essentially the same goals as it does at the secondary level, although it is considerably more limited in its scope and impact. Perkins Act funds provide an inducement for postsecondary institutions to extend educational opportunities to groups that might otherwise be inadequately served, and they permit greater investment in building the capacity of vocational education programs.

Consistent with the lack of a separate and clearly identifiable federal policy interest, postsecondary vocational education has sometimes been viewed as a lesser priority for federal policymakers. In the recent reauthorization of the Perkins Act, the Senate, in fact, sought to diminish the federal role in this area. The Senate version of the bill limited the proportion of Perkins funds that states could allocate to postsecondary and adult students to

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[6]For a discussion of the expansion and vocationalization of the community colleges, see Brint and Karabel, 1989; Grubb, 1984.

[7]The aggregate proportion of Perkins funds spent on postsecondary education masks considerable variation across states. Using the discretion they currently have in allocating funds among levels, the proportion of Perkins money spent on postsecondary vocational education ranges from 8 to 100 percent of state grants (Wirt et al., 1989).

[8]The federal government plays a larger role through its student aid and job training programs (e.g., JTPA), which together provide over 50 percent of federal support for work-related education and training at the postsecondary level, as compared with Perkins funds, which represent only 2.3 percent of the total (Goodwin, 1989).

between 25 and 35 percent. In its report, the Senate Committee on Labor and Human Resources (1989) argued that the bulk of federal funds should be directed to the secondary level because that is where the dropout problem has reached "tragic proportions" and where the "wrenching effect that poverty has upon educational achievement" must be addressed. The committee also noted that assistance to secondary students was particularly critical because vocational education funds represent the major federal investment in secondary school students. In deciding the question of who should be served with those funds, the Senate, which is traditionally more willing than the House to permit state discretion, chose to constrain that discretion. It defined the primary problem that federal funds should address as the need to keep students in high school, and it argued that this function was at least as important as training students for specific occupations. This definition of the policy problem then led to a modification in the designation of policy targets and expected effects.

However, the final version of the 1990 Perkins Act reauthorization embodied the provisions of the House bill, which allows individual states to determine the funding split between secondary and postsecondary vocational education. Thirty-two states currently allocate more than 35 percent of their Perkins grants to the postsecondary level, and the Conference Committee accepted the argument that individual states are in a better position than the federal government to decide the level at which to use that money. Thus federal aid to postsecondary vocational education through the Perkins Act continues to function in much the same way as it does at the secondary level, with states and localities having discretion to allocate funds, as long as they meet federal targeting requirements.

The State Role

State governments typically impose far fewer policy directives on the postsecondary institutions that deliver vocational education than they do on secondary institutions. Postsecondary institutions, which offer programs of two-years' duration or less, are treated more like four-year colleges and universities. State-level boards and legislatures generally take a "hands-off" attitude toward them and leave their direction to local governing boards.[9]

However, this narrower policy role does not mean that states have no influence over postsecondary vocational education. For example, it is the state that makes the decisions about which types of institutions are funded to provide postsecondary vocational education. In the process of expansion, two-year institutions shifted their emphasis from transfer programs to terminal vocational programs. Currently, about three-quarters of the students in two-year institutions who name their field of study are in vocational subjects, and about three-quarters of the Associate degrees are awarded in vocational areas. However, the structure and the purposes of the postsecondary system vary considerably among states: Some (e.g., California) have only community colleges; others (e.g., Indiana) have few community colleges and a preponderance of technical institutes; others (e.g., Texas) have a combination of community colleges and technical institutes; a few (e.g., North Carolina) have community colleges with a limit on the numbers of transfer students; and still others (e.g., New York and

[9]Although minimal state direction in postsecondary vocational education is the norm, there are exceptions. For example, as part of its comprehensive educational reform legislation, passed in 1985, Georgia shifted responsibility for its 32 postsecondary technical institutes from local to state control. The state Department of Technical and Adult Education is now responsible for establishing and enforcing uniform curricula, hiring practices, and evaluation systems.

Indiana) have technical colleges with limits on the numbers of transfer students, effectively ensuring that the schools remain largely vocational institutions.

As in secondary education, another policy area over which state governments exert considerable influence is that of who will bear the costs of postsecondary vocational education. The proportion of total costs borne by the state varies greatly, with some states (e.g., Alaska and California) paying the bulk, others (e.g., Iowa) paying about half, and still others (e.g., Pennsylvania) funding 30 percent or less. In addition to the total amount of funding they provide, states also influence the selection of programs and courses local institutions offer by the criteria they use to allocate funds. For example, in an effort to support what they view as education for economic development, policymakers in Pennsylvania decided to provide additional state funding for certain types of occupational programs. Programs that lead to students' immediate employment are reimbursed at an additional $500 per full-time equivalent (FTE); advanced-technology programs receive an additional $1,100 per FTE; and programs offered on only one or two campuses in the state are reimbursed an additional $1,000 per FTE.

Florida influences local vocational offerings by combining a funding mechanism with state regulation over the labeling of courses by local institutions. The legislature wanted to distinguish among secondary, postsecondary vocational (PSV), and postsecondary adult vocational (PSAV) curricula. The PSV programs are college-credit programs that require longer training and are more cognitively oriented than the PSAV programs, which consist of noncredit education that involves more hands-on, manipulative skills. Through its uniform system of course labeling, Florida required local institutions to downgrade a number of PSV courses to PSAV status—PSAV courses are reimbursed at a lower rate ($2,684 per FTE, compared with $3,582 for PSV).

State funding arrangements also create incentives or disincentives for local institutions to serve certain numbers and types of students. For example, after the passage of California's Proposition 13, the state imposed funding caps on community colleges that limit the enrollment for which they can receive state reimbursement. This arrangement has created a strong disincentive for institutions to increase their enrollments unless they can find alternative funding sources. Similarly, Florida community colleges can receive additional reimbursement from the state only if they show an increased enrollment of at least 5 percent that is sustained for three years. Consequently, local institutions have little short-term incentive to increase enrollments.

Some states have enacted policies that seek to shape the types of vocational education programs that local institutions provide. For example, Iowa's Senate File 449 requires that by 1992, all community college vocational programs be competency-based and articulated with secondary education. Illinois regulates the total number of hours required for an Associate degree in an occupational area and specifies that a quarter of those course-hours be in general education.

Concern about the high attrition rate among community college students[10] has led a few states to enact policies aimed at increasing student retention. These states have used different kinds of policy instruments. For example, Florida students who wish to enroll in any vocational program of longer than 450 hours must be tested in mathematics and lan-

[10]Survey data from a nationally representative sample of the high school graduating class of 1980 show that 42 percent of those who enrolled in community colleges left without earning a degree or certificate. After four years, only 9 percent of the black students had earned a degree or certificate, compared with 20 percent of the whites and 21 percent of the Hispanics (Goodwin, 1989).

guage skills. Those who fall below a certain level of competency must enter a remediation program, and they must pass the basic skills test before they can earn a certificate. Thus, the policies can directly affect the kind of coursework available to some students.

Largely because state law requires the state to fully fund any mandates it imposes on local institutions, California has chosen to provide the inducement of additional state funding to encourage community colleges to test students' readiness for vocational programs and to provide remediation to those who need it.

Except for the state role in determining what types of public institutions provide postsecondary vocational education and who bears their costs, the policies cited above tend to be atypical. Most states have decided that questions about what vocational education should be provided and what its outcomes should be are best left to the discretion of local institutions and their governing boards. There is some indication that as states have become more concerned about the quality of their labor force and the low educational attainment of many students, they are considering taking a more active role in shaping postsecondary vocational education. But that role is still quite limited, particularly compared with the state presence in secondary education.

Local Response and Policy Effects

Given the narrow scope of federal and state postsecondary vocational policy, it is not surprising that local institutions in our eight-community sample reported that their behavior was affected little by either the federal or state government.[11] Whatever effects local institutions have felt from top-down policies have been primarily in the area of finance. State fiscal constraints that have resulted in enrollment caps and freezes on state funding levels have forced community colleges and other institutions offering postsecondary vocational education to become more entrepreneurial. As will be discussed in subsequent sections, their modal response has been to offer shorter-term training to a variety of clients. Since the 1970s, a major growth area for many community colleges has been customized programs for local firms that require specialized training for groups of employees, often provided at the worksite. Some of these endeavors are supported by state funds aimed at attracting and retaining industry, and others are supported entirely by firms receiving the training. Other forms of short-term training provided by postsecondary institutions include services to JTPA clients and, more recently, to welfare recipients enrolled in various welfare-to-work programs.

In sum, the direction community colleges have taken over the past two decades has not been a result of vocational education policies *per se*. Rather it has been a response to changing student demographics, funding sources, and labor markets, and to the colleges' own desire to create a market niche distinct from that occupied by four-year institutions (Brint and Karabel, 1989). The postsecondary vocational institutions that have been affected by federal and state policies are primarily the ones discussed in the next three sections.

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[11] Postsecondary institutions in the two Florida communities, Miami and Jacksonville, were the most affected by state vocational education policy. The "leveling down" policy has been instrumental in reducing competition among providers in Miami and in generating programs that can be articulated across various levels of the educational system. In Jacksonville, the state decision to assign adult vocational education to the community college was one of several factors leading to the emergence of the community college as the dominant education and training institution in the area.

Other state policies that shape postsecondary vocational education in Florida include the requirement that for a local institution to retain its funding, 20 percent of all enrollees must complete the program and 70 percent of the program completers must find appropriate employment.

THE JOB TRAINING PARTNERSHIP ACT (JTPA)

The Federal Role

While both secondary and postsecondary vocational education were expanding, a third development—entirely federal in origin—led to job training programs outside the schools. The Manpower Development Training Act (MDTA) of 1962, a response to the unemployment of the 1960–1961 recession and the later discovery of high unemployment rates among blacks, established job training programs administered by the Department of Labor, separate from federal support of vocational education.[12] The establishment of an independent funding mechanism was based in part on the poor reputation of vocational education (as signaled by the establishment of President Kennedy's Panel on Vocational Education) and in part on a general feeling that secondary schools were not equipped to provide nontraditional training for adults. (At the time, postsecondary vocational programs—more appropriate settings for job training than high schools—were not well established.) In addition, the Department of Health, Education and Welfare did not relish the prospect of additional administrative responsibilities, and the American Vocational Association, the most influential political interest group within vocational education, was not especially strong outside that arena. Therefore, training programs were established that would operate outside the school system, administered by the Department of Labor—including the Neighborhood Youth Corps, the Job Corps, and the Community Action Program (which used about one-fifth of its funds for education and training), in addition to the MDTA. These programs were then consolidated in the Comprehensive Employment and Training Act (CETA) of 1973. Like the programs it combined, CETA provided little role for state governments and gave local administrative units greater decisionmaking power over the types of training provided, the groups of individuals served, and the institutions offering training and other services.

States were given additional authority by JTPA, the successor to CETA, enacted in 1983. State governments now designate local service delivery areas (SDAs), and they can establish priorities for SDA use of a portion of the federal grant. However, in contrast to vocational education, where state and local funding predominate, JTPA still remains a federal rather than a state program: Nearly all funding comes from the federal government, federal regulations apply to all programs nationwide, and many states have made no effort to assert a role in policymaking beyond that required by federal regulation.

The development of job training programs did more than simply add new funding sources for work-related training; it also dramatically changed the types of institutions that provide training. Job training programs since the 1960s have been characterized by their use of CBOs, unions, private firms, and other institutions—private alternatives to conventional high schools, community colleges, and technical colleges—to provide training and related services. This aspect of job training has given the education and training system greater variety and fluidity and has helped erode the boundary between public and private programs.

Job training also marked a turn toward private sector participation in public programs, not only with the funding of private organizations such as CBOs, but also with the establishment of Private Industry Councils (PICs), at least 51 percent of whose members must represent the private sector. The PICs are responsible for policy guidance and program over-

[12]On the history of manpower policy, see National Academy of Sciences (1975).

sight, and they must approve SDA training plans. They also have the option to administer JTPA programs directly, although fewer than 20 percent do.

Establishing PICs was not the only way in which JTPA represented a major departure from previous federal job training programs. Like its predecessors, JTPA used an inducement as its primary policy instrument, supplemented by a mandate that imposes requirements on local agencies as a condition for receiving funding. However, JTPA differs from the earlier programs in the nature of the mandates it imposes. While its predecessors focused on the types of services that local agencies could deliver, JTPA emphasizes outcomes by requiring that SDAs meet specific performance standards. The federal government has identified twelve standards[13] from which states select eight that SDAs must meet; states may add standards of their own and may use either a federal adjustment model or one of their own design to take into account the demographic and labor market characteristics of individual SDAs.

In emphasizing what should be produced, rather than who should provide services or what the service mix should be, JTPA is consistent with a policy model that assumes that the way in which goods and services are produced should be left to local discretion and that outcomes should be the preeminent concern of policy initiators. However, JTPA's instruments are less formidable than pure inducements, which are intended to elicit performance through a sufficiently high level of monetary awards, or mandates that impose significant sanctions with predictable regularity. The maximum amount that states can use to reward those SDAs that exceed performance standards equals only 6 percent of state grants, and although states may impose sanctions on underperforming SDAs in the form of funding withdrawals, they have been very reluctant to do so.

Like the federal vocational education program, JTPA specifies who is to be served with its funds, but also like the Perkins Act, JTPA has limited control over who actually receives services. About 65 percent of JTPA funds (under Title II-A) are designated for economically disadvantaged adults, defined by criteria such as family income, receipt of welfare or food stamps, or handicapped status. Up to 10 percent of the participants enrolled in the II-A program need not be economically disadvantaged if they have other barriers to employment (such participants would include teenage parents, school dropouts, displaced homemakers, older workers, ex-offenders, substance abusers, and persons with limited English proficiency). Approximately 25 percent of JTPA funds are targeted for programs for economically disadvantaged youth (Title II-B) who must meet criteria similar to those for adults. The final 10 percent of JTPA funds (Title III) are designated for dislocated workers. The eligibility requirements are not as specific for Title III as they are for the Title II programs, and states and SDAs have considerable flexibility in determining which dislocated workers can be served. Because JTPA funds are sufficient to serve only about 6 percent of the eligible population (U.S. GAO, 1989), however, SDAs also have substantial discretion in whom they serve in the Title II programs.

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[13]For program years 1988 and 1989, the adult standards included percent of participants placed in jobs (68 percent); average hourly wage at job placement ($4.95); average cost of placement ($4,500); percent of welfare recipients placed (56 percent); percent of participants employed at 13-week follow-up (50 percent); number of weeks worked at follow-up (8); and weekly earnings at follow-up ($177). The youth standards included a positive termination rate, cost per positive termination, entered employment rate, and employability enhancement rate.

The State Role

Even though the JTPA legislation affords states an opportunity to shape local programs, the overwhelming majority of states simply serve as funding conduits and administrators. Very few impose additional performance standards on SDAs, and most use the federal adjustment model in modifying local performance targets. Many states also collect no data on the array of local program services and their providers beyond those required by the federal government. For example, they do not know what proportions of clients receive OJT, classroom job training, basic skills instruction, or job search assistance. Similarly, they do not know what proportion of services are delivered by CBOs, community colleges, area vocational facilities, or proprietary schools.

There are some exceptions to these general trends, however. A few states use JTPA funds and the service delivery network the program has created to promote state priorities that are generally consistent with JTPA goals. For example, the current governor of Pennsylvania has set workforce development for those with multiple barriers to employment as one of his priorities. Given severe limits on the availability of new funding, he is also concerned about using existing funds cost-efficiently and not duplicating programs or service delivery structures. As a result, he has designated the state's SDAs as the lead local agencies in implementing the state's demonstration welfare-to-work program. To encourage SDAs to provide longer-term, more expensive training to those who lack both academic and job skills, the state has also removed all cost standards from the required JTPA performance measures. In addition, the state is combining JTPA, welfare, and state customized job training funds to support joint projects for welfare recipients. California is another state that has coordinated JTPA with other job training programs and is also using it to advance an area of state investment. California has designated half of its 8 percent coordination funds for basic skills instruction for clients enrolled in Greater Avenues for Independence (GAIN), the state's welfare reform program.

A number of other states, including Indiana, have used JTPA funds in their economic development packages to attract new industry to the state. In some instances, this strategy has been controversial because it has provided OJT (which includes a wage subsidy) to workers who are not economically disadvantaged or to firms that would have provided the same level of training without the JTPA funds. The U.S. Department of Labor's Inspector General recently raised serious questions about some of these uses of JTPA funds. This led Congressional Democrats and the Republican leadership of the Department of Labor to propose changes in JTPA that would more narrowly define the categories of students and institutions eligible for assistance. However, state governments oppose the loss of flexibility to use JTPA as part of a broader strategy for advancing workforce development objectives (Victor, 1990).

Local Response and Policy Effects

Because the federal program establishes a broad framework for who can be served, the general categories of services that can be provided, and, more specifically, the outcomes of those services, local JTPA programs display key similarities across SDAs. But they also have considerable variation.

They are all affected similarly by the federal performance standards. It is commonly assumed that the performance standards, combined with insufficient funds for serving all eligibles, drive SDAs to serve those within the general eligibility categories who are most likely

to find employment, and then to provide them with shorter-term, less expensive services (e.g., OJT as opposed to basic-skills instruction). Although there is evidence that this happens (Victor, 1990), a recent study of 63 of the country's 600 SDAs found that the proportion of the "less job ready" (defined as those without recent work experience, those who are receiving Aid to Families with Dependent Children (AFDC) or general welfare, those who have not completed high school, and blacks and Hispanics) participating in JTPA programs is equal to their incidence in the general population (U.S. GAO, 1989). On the other hand, JTPA also serves the "more job ready" (i.e., those with recent work experience, those not receiving welfare, those who have completed high school, and whites) in the same proportion as their incidence in the general population. In addition, the "less job ready" were less likely to receive occupational training than the "more job ready," and if they did receive it, they spent less time in such training. More than one-quarter of the "less job ready" received only job search assistance, and 88 percent of the high school dropouts in the GAO sample received no remedial education. One might argue that if SDAs were less constrained by performance standards, these data might look quite different. The SDAs might serve a greater proportion of those least prepared for employment and might provide them with longer-term, more expensive services.

But the relationship between the performance standards and what has been called "creaming" is by no means straightforward. The National Commission for Employment Policy (1988) found that SDAs are influenced by three different objectives: (1) serving specific types of clients; (2) responding to local employer needs and interests; and (3) achieving specific levels on the performance standards. The relative emphasis SDAs place on these three objectives varies a great deal, and only those that are preoccupied with meeting performance standards are likely to cream extensively. The SDAs' response to the performance standards is also a function of the context for implementation, i.e., the local or regional labor market. For example, our local case studies suggest that where unemployment is relatively low, JTPA programs typically do not have enough eligible applicants and cannot engage in creaming; but in regions where unemployment is high and the pool of eligibles is large, creaming can occur. Philadelphia and Scranton are examples of communities where, as economic conditions improved in the late 1980s and the labor market tightened, the pool of potential JTPA participants changed significantly and necessitated a different level of training (e.g., classroom training that expanded from an average of three months to nine months).

Many communities have responded to the JTPA performance measures by using performance contracting, in which the SDAs issue contracts to service providers under which they receive partial reimbursement at each of several benchmarks—e.g., enrollment of participants, midway through training, completion of training, job placement, and continued employment at 60 or 90 days. If any of those milestones are not met, the service provider loses a certain proportion of its per capita reimbursement. This payment mechanism shifts the risk that SDAs must bear to service providers, thus increasing the likelihood that providers will work to attain the JTPA performance measures. However, the attempt to shift the responsibility for JTPA service delivery and its outcomes also has the effect of discouraging some providers from participating in the JTPA program. For example, some local school districts argue that job placement is not part of their mission, and that to participate in a program where they may not receive full reimbursement is to act irresponsibly with taxpayers' money.

Another local response that shifts costs from SDAs to other institutions is the effort in some communities to place JTPA clients in the public education and training system, where

their training is subsidized by state and local general funds reimbursement. When JTPA clients are placed in community colleges, area vocational schools, and comprehensive schools, JTPA often pays only the excess costs above what the state and locality provides per FTE. This not only expands the funds available for JTPA, but also converts what is nominally a federal program into a federal-state one without significant policy direction from the state.

The major differences across SDAs lie in who provides JTPA services and in what those services are. For example, in Des Moines, 80 percent of JTPA clients receive classroom training, whereas in Miami, 80 percent receive OJT. In Des Moines, Sioux City, and Jacksonville, the community colleges are the major providers of JTPA services. In Fresno and San Jose, most JTPA services are provided by CBOs, with the community colleges playing a very limited role. These variations stem from the fact that the federal program establishes expectations about program targets and outcomes, but not about providers or services (except to specify some very general parameters). As a result, the local political and organizational context exerts a major influence on how the policy is implemented. Factors such as the historical mission of education and training institutions in different communities (e.g., whether the community college is primarily transfer-oriented) and political relationships between key constituency groups and elected officials are significant in shaping local JTPA programs precisely because Congress stressed certain elements in designing JTPA.

WELFARE-TO-WORK PROGRAMS

The Federal Role

A fourth strand of work-related education and training has developed as part of the welfare system. In 1962, a small training program for welfare recipients, the Community Work and Training Program, was established. Like MDTA, it provided funds from the Department of Labor, which could be used by welfare programs at the local level, bypassing the vocational education system. The Economic Opportunity Act of 1964 included yet another program designed to encourage work, the Work Experience and Training Program. In 1967, as part of the far-reaching Amendments to the Social Security Act, the Work Incentive (WIN) program was established as a voluntary work program. Although WIN was made mandatory for welfare recipients in 1971, it was not funded at a level that made widespread participation enforceable, and therefore it remained a limited and voluntary program.

Another strand of the War on Poverty was the "services strategy" developed as an antidote to poverty. This strategy provided a variety of support services (such as child care and transportation) to enable welfare recipients to work their way off welfare. As embodied in the 1967 Amendments to the Social Security Act, it included funding for short-term training. The support services, which were then consolidated in the Title XX Amendment of 1973, provided funds for social services to states and gave states greater authority to decide which services should be provided. Title XX emerged largely intact (though with considerably reduced funding) in the Social Services Block Grant, enacted in 1981. However, in practice, work-related services (including training) were rarely provided under Title XX, which focused instead on rehabilitating families on welfare and preventing abuse, rather than facilitating employment (Dickinson, 1986).

In 1981, the Reagan administration, building on a history of "welfare-to-work" programs that forced welfare recipients to work in exchange for grants, allowed states to develop their

own programs for getting welfare recipients back to work. The state programs that developed were, not surprisingly, enormously varied. Most relied heavily on job search (i.e., short-term assistance in applying for work, but no other training or support services) and work experience or OJT, both accomplished through short-term job placements. A few developed Community Work Experience Programs (CWEPs), in which welfare recipients provide community service in amounts related to the size of their grants—equivalent to the traditional conception of "workfare." Although 84 percent of the programs offered vocational skills training and 72 percent provided post-high school education, in practice only 2.3 percent of the welfare recipients participating in these programs received any skill training, and only 1.6 percent enrolled in postsecondary education (most of these were in Massachusetts, Michigan, and California). In fact, only 3.2 percent received remedial education; even the most basic forms of education and training were quite rare.[14] In practice, then, experimentation with various kinds of services and "welfare-to-work"[15] strategies led to an emphasis on job search, rather than education, training, or other services.

The most recent development in this area is the Family Support Act of 1988, which requires all states to establish JOBS programs to increase the employment of welfare recipients. The legislation provides federal matching funds—ranging from 50 percent to 72 percent of total costs—for a variety of work-related services, including job search, work experience, counseling, child care, and other support services, and all forms of remedial education, vocational education, and training. This new legislation combines the services strategy of the 1960s with the work-related emphasis of WIN (including the use of education and training).

With JOBS, Congress crafted a program that combines a mandate (participation is mandatory for all AFDC recipients who are single heads-of-household and who have no children under three years of age[16]), inducements in the form of services (e.g., one year of health care after participants obtain a job, and transitional child care) to reduce the cost of moving from welfare to employment, and capacity-building through longer-term investments in education and training (typically up to two years). As it has done with vocational education and JTPA, the federal government has attempted to target JOBS service recipients. To avoid a situation in which states primarily serve those most likely to get off welfare even without additional assistance, the federal government requires that 55 percent of states' JOBS funds be spent on those most at risk of long-term welfare dependency (e.g., young mothers who are also high school dropouts).

To some extent, the federal government has specified the services that can be provided by designating which ones are reimbursable. It has also been fairly specific in defining service levels. For example, the proposed JOBS regulations specified that only people who were spending at least 20 hours a week in authorized activities could be counted by states as JOBS participants. The states protested vigorously, arguing that some effective education

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[14]These figures refer to participation in WIN demonstration programs (U.S. GAO, 1987).

[15]Applying the term "workfare" to the experimental welfare programs of the 1980s is somewhat misleading because few of them included CWEP, and the mandatory elements that were historically part of workfare—e.g., the threat that welfare recipients would lose their grants if they failed to comply with work requirements—have not been frequently used. Enrollments in these new programs have been kept relatively low, partly for reasons of cost, so there has been greater emphasis on voluntary than on coerced participation.

[16]In a departure from past welfare policy, JOBS also allows families in which both parents are present in the home and the primary wage-earner is unemployed to qualify for benefits and services, and it requires that one parent participate in training. However, like WIN, funding limits mean that JOBS will not function as an enforceable mandate. The federal government is requiring that states enroll 7 percent of their total welfare caseload in 1990 and that the proportion increase to 20 percent by 1995.

and training programs require fewer than 20 hours a week (e.g., a full community college courseload typically includes 12 to 15 hours of classroom work per week). The U.S. Department of Health and Human Services (HHS) subsequently changed the regulations to make the 20-hour requirement the average for groups of participants (Kosterlitz, 1989).

Despite clear federal specifications for some aspects of service delivery, the federal government has given the states considerable flexibility in deciding which types of services will be provided, who will provide those services, and the scope of the programs. Even though the JOBS program represents a major new source of federal funding for education, job training, and related services, it requires a substantial matching of funds (between 37 and 50 percent, depending on the services) from the states. It appears that although most states will eventually increase their total spending for welfare recipients, the level will vary greatly—thus perpetuating the differences in welfare benefits and services among states. Many state legislatures will appropriate insufficient funds to match the maximum federal funding.

The question of what program outcomes the federal government expects is still open to argument. HHS will not establish performance standards until 1995. In the meantime, debate will continue over what many have called the "hamburger flipper" question: Is it better to move welfare clients quickly into jobs, even if those jobs do not pay enough to lift them out of poverty, or is it better to spend more time and money to increase the clients' chances for longer-term, higher-paying employment that may keep them from falling back onto welfare in the future? (Kosterlitz, 1989). The way the answer to this question is articulated in the federal performance standards will largely shape the amount and type of work-related education and training available to welfare recipients.

The State Role

The role that states will play in JOBS is not entirely evident, because the states had until October 1990 to implement the program. The first states to do so were those that had created substantial welfare reform programs of their own prior to JOBS. These programs, such as GAIN in California, ET Choices in Massachusetts, Joint Jobs in Pennsylvania, and Project Chance in Illinois, enable us to draw some inferences about the state role—at least in activist states that have a commitment to welfare reform.

Even in states that have made a considerable investment in work-related programs for welfare recipients (e.g., California is spending about $200 million annually), only a small proportion of the eligible population is being served. For example, only 5 percent of the mandatory population is enrolled in Pennsylvania's demonstration program. In California, about 30 percent of those receiving AFDC are enrolled in GAIN. However, an evaluation of GAIN's first two years by the Manpower Demonstration Research Corporation (Riccio et al., 1989) found that of 100 typical registrants, 66 either did not even attend an orientation or did not participate in any program component. About 11 percent received education or training and another 14 percent received instruction in basic academic skills. Although the Pennsylvania program has a lower proportion of enrollees, an evaluation of its first two years found that participation in occupational skills training ranged from 11 percent to 45 percent across the initial ten local sites (an average of 31 percent), and participation in remedial education ranged from 8 to 31 percent (averaging 17 percent) (Finkel et al., 1990). About 30 percent of those enrolled in Florida's Project Independence are receiving training, while the re-

mainder, largely because of funding constraints, are considered "job ready" and receive only job search assistance and support services.

In some states, including Massachusetts and Pennsylvania, the welfare reform programs initiated prior to JOBS were voluntary.[17] In other states, program participation was mandatory for at least some welfare recipients. However, even within that category, the extent to which these programs actually functioned as mandates varied. Some states required that welfare recipients undergo only initial assessment and orientation; any services or training beyond that were essentially voluntary. Pure mandates require that some type of sanctions be imposed for noncompliance. In welfare programs, sanctions may consist of removing control over all or part of a welfare grant from a recipient and giving it to a third party (e.g., a landlord, a social worker) to disburse on the client's behalf, or they may be temporary reductions or interruptions of AFDC benefits. Sanctions, however, typically affect only a small proportion of a program's target population. For example, in fiscal year 1987, only about 3.7 percent of the GAIN participants in California were sanctioned (California Health and Welfare Agency, 1988). Similarly, the General Accounting Office (1988) reported that in fiscal year 1986, sanctions were imposed on 1.2 percent of participants in Texas and 5.6 percent in Michigan.

States that moved to reform their welfare systems prior to the JOBS legislation used a combination of policy instruments. A notable addition was the decision to invest in longer-term education and training. The notion that capacity-building instruments were needed to help welfare clients move toward economic self-sufficiency stemmed from data on the experience of earlier programs. Although those programs had required welfare recipients to register for work and had provided them with some type of job search assistance, the results were limited to the type of minimum performance implied in the mandates. In those programs for which results were measured, only a minority of adult AFDC recipients participated; median job placement rates ran about one-third; and most participants earned wages only about 20 percent above the federal minimum wage (U.S. GAO, 1987). These data suggested to policymakers that longer-term, capacity-building strategies were needed. This perception was confirmed by data from the first year of literacy testing of welfare recipients in California's GAIN program. About 60 percent of those surveyed were found to need remedial reading, writing, or mathematics (Riccio et al., 1989). Of 6,000 people tested, 36 percent scored so poorly that they were referred to remedial education for six to twelve months before they could receive any job training or work assignments.[18] As a result of such findings, about one-third of the 1986 statewide GAIN budget was allocated to educational remediation and an additional 35 percent was spent on nonremedial education and training (Manpower Demonstration Research Corporation, n.d.).

In designing their programs, policymakers in some states addressed secondary problems in addition to the main one of moving welfare clients toward greater self-sufficiency. For example, policymakers in California, Illinois, and Pennsylvania identified the current lack of coordinated services as a problem that their welfare reform policies should address.

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[17]Pennsylvania has two welfare-to-work programs with education and training components. The first, New Directions, is a successor to the state's WIN demonstration program and is mandatory for all welfare recipients falling into several designated categories. The second, the Joint Jobs Initiative, is voluntary. Joint Jobs provides more extensive counseling, case management, and education and training than recipients would typically receive under the mandatory program.

[18]Data collected a year later from a standardized test administered to more than 32,000 California welfare recipients indicated that 67 percent could not read, write, or compute well enough to find and keep a job (Paddock, 1988).

Rather than using an integrated approach to case management, states and counties have traditionally required welfare recipients to make separate applications and deal with several different agencies. Moreover, services such as job search were often duplicated by local employment offices and JTPA training programs. A solution to this problem has been to create a single point of contact for program participants to assess their needs and coordinate service delivery. This requires building local service networks that include, in addition to the county welfare office, community colleges, adult schools, local employment offices, JTPA programs, and child-care agencies. For such a system to work, policymakers must design instruments that not only motivate welfare recipients to change their behavior, but also encourage the institutions serving them to change the way they deliver services and interact with other local agencies. In the case of welfare reform, then, some states are relying on multiple instruments because they view the policy problem as a multidimensional one.

The more comprehensive state programs selected policy targets that were later echoed in JOBS. Because the WIN demonstration programs emphasized immediate job search and placement, they tended to target clients who were most likely to benefit from those services (viz., those with recent job experience). Policymakers argued that by targeting in this way, states could increase the number of recipients who would find a job at the lowest possible cost, thus maximizing the use of limited funds (California Legislative Analyst, 1985). For example, Texas had an informal policy of serving job-ready registrants first, based on the rationale that other registrants would need education and training before they could effectively use the program's services (U.S. GAO, 1988). However, research evidence showed that the least-dependent AFDC recipients did not achieve above-average, statistically significant earnings gains as a result of program participation, and those with less job readiness (e.g., returnees to welfare) experienced greater impacts (Friedlander and Goldman, 1988). These findings contributed to a change in targeting priorities, at least in a few states. For example, in its single-point-of-contact demonstration, Pennsylvania has established a very different set of target-group priorities: AFDC mothers with children under six years of age; AFDC mothers who have been receiving welfare benefits for more than two years; individuals with a reading level below sixth grade; and individuals with limited English-speaking ability. Local providers are also encouraged to serve homeless individuals, ex-offenders, individuals completing drug or alcohol rehabilitation programs, and Vietnam-era and disabled veterans. The assumption is that the program should target the hard-to-serve whose multiple barriers to employment inhibit their selection into services such as regular JTPA programs. However, local providers are free to establish their own definitions of the hard-to-serve within these general state guidelines. Localities differ in the combination of target groups they have chosen to serve, but most have decided to give priority to two to four of the state's target groups (Kulik et al., 1988). Because a number of states (e.g., California and Massachusetts) operate on a first-come, first-served basis, those who volunteer are, in effect, given first priority. However, some state and local welfare agencies also target those who have been on welfare for more than two years.

Some states with substantial programs are fairly prescriptive, not only about who is to be served, but also about the type and sequence of services. For example, California requires that GAIN clients must achieve a specified level of proficiency in basic skills before they can move on to occupational training.[19] To accommodate the competing preferences of state

[19]Some California counties have found that this required sequence is a disincentive for clients to stay in the GAIN program. Many are attracted to the program because of the prospect of occupational training, and they

policymakers who view GAIN as a strategy for quickly moving welfare clients into employment and those who see it as human-capital development, the state also requires that registrants who do not need basic skills education must participate in job search activities before they can enroll in longer-term occupational training (Riccio et al., 1989).

Despite efforts by some states to standardize welfare-to-work programs in several key ways, localities still have considerable discretion in how they deliver services, particularly in how they configure a service strategy from among the various local institutions that provide counseling, assessment, job search, education and training, and related services such as child care.

The experience of states that implemented substantial welfare-to-work programs prior to JOBS may reveal little about programs in other states such as Colorado, which has allocated only $2.1 million for JOBS. However, that experience does suggest that even the most committed states will be unable to serve all their eligible population adequately[20] and that the federal program will be further shaped by state priorities, feasibility considerations, and political culture.

Local Response and Policy Effects

It is too early to tell how localities will respond to the JOBS program. Even communities in states with prior programs are still in the early years of implementation, and substantial modifications are likely. But we do know that communities in this latter group have not created new service delivery mechanisms in implementing their states' welfare-to-work programs. Rather, they have relied on existing institutions. Many welfare offices have turned over part or all of their services to local JTPA programs, including the CBOs that have traditionally provided services for JTPA clients. They have also made extensive use of the adult education system for remediation and, in some places, of postsecondary vocational institutions for occupational training. In fact, in our eight community case studies, the advent of welfare reform programs has been a catalyst for local institutions to establish a clearer division of labor among themselves, and local welfare agencies have played a major role in convening institutions and brokering among them. We also found that while secondary vocational education was often the least involved in welfare-to-work activities, there was a sense that if they so chose, their role could increase, if more emphasis were placed on serving young parents who have not graduated from high school.

While it is too early to assess the local effects of welfare-to-work initiatives, the experience of some communities does suggest the magnitude of the challenge. GAIN officials in Santa Clara County (San Jose), for example, estimate that because of high rents and a shortage of subsidized child care, GAIN participants need to find jobs that pay at least $10 an hour to keep them from falling back onto welfare. Currently, those finding jobs have an average wage of about $7 an hour, and in many states, it is closer to $5 an hour. In California, about 50,000 GAIN clients statewide had obtained jobs as of June 1989, but only 14,400 were earning enough money to move off welfare completely (Shuit, 1990).

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become discouraged when they must first master basic academic skills—a task at which many of them had failed earlier. As a result, the state is allowing some counties to experiment with a "concurrency" strategy, which allows clients to spend half their time in basic skills instruction and half in occupational training.

[20]Pennsylvania estimates that its Joint Jobs program costs about $4,500 per participant. However, because of high attrition, if the cost is denominated by the number of participants who actually complete the program and obtain jobs, the estimate rises to $10,000.

STATE-FUNDED JOB TRAINING PROGRAMS FOR ECONOMIC DEVELOPMENT

The State Role

The final strand in the work-related programs we examined is the emergence of state-funded job training programs. By now, such programs exist in all but a few states; some of the better-known ones are the Employment Training Panel (ETP) in California, Massachusetts's Bay State Skills Corporation (BSSC), Kentucky's Bluegrass State Skills Corporation, and Florida's Sunshine State Skills Corporation. Although most states have enacted only one job training program, some—including Illinois and Massachusetts—have enacted several, with varying purposes and target groups. These programs are often quite visible in states and local communities. They also offer an interesting case study in state-initiated policy design that is both an enhancement of and a reaction to the other work-related education and training programs we have examined.

Most of the state job training programs are quite small, compared with vocational education and JTPA. For example, the BSSC, one of the most widely cited and copied of these initiatives, spent only $5.6 million in 1988, while JTPA spent about $39 million in Massachusetts, and vocational education spent several times that amount. Only California's ETP, funded at $55 million a year, has substantial resources; most states spend between $2 million and $4 million annually on their programs. Therefore, these new programs may be important primarily for the flexibility they provide, for their facility in responding to the needs of particular employers in ways that other education and training programs cannot, or perhaps just for the symbolic value of mounting a training program clearly linked to economic development. Despite their high profile in many states, however, these programs do not represent a major portion of the resources available for education and training.

The policy problem that all state policymakers saw themselves addressing with these programs was the need to stimulate economic development. However, more precise definitions of the problem have shifted over time as programs have evolved and economic conditions have changed. When job training for economic development programs was first started some thirty years ago, programs were designed largely to influence the locational decisions of firms. However, as more states developed programs and as the states' industrial bases shifted, "smokestack chasing" became a less effective strategy. Therefore, states have increasingly begun to redirect at least part of their efforts toward a job-retention strategy that helps firms upgrade so that they can remain economically competitive. Although the need to attract new firms (particularly foreign ones) remains a priority in most states, the policy problem has been defined in a much broader way than it was in the past (Osborne, 1988; Fosler, 1988; Ganzglass and Heidkamp, n.d.).

Nevertheless, little attempt is made to determine which employers are most likely to enter or leave a state, although a few states limit the sectors eligible for program services. Iowa does not support health, retail, or professional establishments; Texas funds only manufacturing and not service-related firms; Virginia funds training for manufacturing and service firms, but not agricultural or retail employment; and in Kansas, retail establishments are not eligible for support. These restrictions can be interpreted as efforts to limit support to those sectors that are most mobile, and therefore most likely to respond to training incentives.

The training programs that states rely on to promote economic development differ considerably in their mix of policy instruments. The lead instrument in all the programs is an

inducement in the form of a total or partial subsidy to fund training, customized to the specific needs of a particular firm or industry. However, some states have decided to establish a new institution to administer such training, while others have chosen to rely on existing ones. Although schools or community colleges are involved in delivering such services in the overwhelming majority of states, several—including California, Kentucky, Massachusetts, Minnesota, and Rhode Island—have established quasi-independent boards whose members are appointed by the governor and who run the program outside of traditional executive agencies. The policymakers in these states assumed that because these programs would not be bound by the norms and procedures of existing bureaucratic agencies, they could be more flexible in marketing and providing firm-specific training. In explaining why new administrative bodies were established in these states, respondents gave reasons such as the following:

> A new agency was established to send a signal, to tell the private sector that [the state] would be flexible and responsive to private sector need.
>
> We were able to wipe the slate clean and give it whatever characteristics we wanted. We didn't have to spend a lot of time circumventing rules. . . . There was a feeling [in the state] that the economy was changing rapidly and the bureaucracy was unable to respond.
>
> [The new agency] was an attempt to remove industrial training funds from the Department of Education in order to create a more collegial, comprehensive approach to using those funds.
>
> A new administrative agency was created because the program needed to be flexible. Also, it was enacted in the final days of CETA and [program designers] were trying to get away from some of the bad baggage of CETA. They wanted a fresh start.

These states have relied on system-changing instruments by bringing new institutions into the education and training system in promoting economic development. Other states, however, have used traditional state agencies to administer their programs. In Pennsylvania, the program is administered by the state Department of Education, and firms applying for customized job training must submit their application through a local education agency (school district, AVTS, community college, state college, or university). The state thereby guarantees that even if educational institutions do not directly deliver training services, they are involved in designing and monitoring them.

Most states with economic development programs provide training directly or reimburse others for training they provide. However, Illinois uses another kind of system-changing instrument in its program: Vouchers for up to $2,000 are offered to unemployed individuals, and vouchers for up to $1,000 are offered to those in danger of being laid off without retraining. These vouchers can be used at public and private sector training institutions to cover such expenses as tuition, fees, and supplies. Illinois uses these inducements as one element in an economic development strategy that targets different kinds of firms and workers with a range of different services.

State-funded training programs are also characterized by significant flexibility and adaptation to individual firms' needs. State-level respondents reported that this flexibility is

key to convincing businesses, traditionally suspicious of governmental job training efforts, to view state programs as incentives for locating in the state or for upgrading their existing operations. The major criterion—and often the only one—for judging program effectiveness in many states has been whether or not there is employer demand for the program's services. However, some analysts have suggested that because these programs typically do not collect information about trainee characteristics and outcomes, they are held less accountable for the expenditure of public funds than job training programs that have mandated performance standards (Stevens, 1986).[21]

A major change in publicly funded job training programs occurred when state governments initiated economic development programs and shifted the primary policy target away from individual workers to employers. With this demand-side approach, individual workers benefit from job training only if they are current or prospective employees of firms receiving program services.

A focus on firms as the primary policy target and an emphasis on economic development rather than assistance to disadvantaged individuals characterized the earliest state programs, particularly those in the South. The purposes and targets of these programs were defined by their administrators as follows:

- The focus should be on the company and not on the trainees.
- The goal of the program is economic development, not social change.
- A program is an economic development tool—its purpose is not to help society.

However, recent programs have generally taken a more multipronged approach to the problem of economic development. For example, Illinois has three state-funded job training programs targeted at very different groups. The High Impact Training Services Program provides training for firms that are planning to locate in Illinois or to expand their operations there. A second program, the Industrial Training Program, is designed to assist firms whose production is expanding. The third, Prairie State 2000, has two component programs. One program, the Individual Training Assistance Program, provides training vouchers to persons who are unemployed or in danger of being laid off. The other, the Employer Training Assistance Program, provides training services to firms that are either unprofitable or whose investment in capital equipment has left them with insufficient resources for training.

The BSSC is another example of a state entity, initially designed to promote economic development by brokering training for firms, that has expanded its mission to include training services for individuals. It runs a Displaced Homemakers program which operates as a system of networks providing job training, counseling, and referrals. The BSSC also provides

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[21]The ETP in California was designed to address this accountability problem, at least partially. The program is based on fixed-price performance contracts: Training institutions are not reimbursed until a trainee has been employed for at least 90 days in a job that utilizes the skills learned. Although this mechanism means that trainee outcomes are taken into account, it has raised a different set of issues related to the allocation of public funds. Because of the uncertainty about whether or not they will be reimbursed, training institutions prefer to take contracts to train those whose ability to meet the 90-day requirement is high—viz., those already employed by a client firm. Of the 3,923 people who received ETP training through 1985, 40 percent were current employees of firms requesting training services. Analysis of the impact of completing ETP training on posttraining earnings shows a significant effect—between $3,000 and $4,000 for new hires—but a statistically nonsignificant difference for those being retrained (Moore et al., 1988). Some respondents in our survey argued that by emphasizing retraining (as opposed to creating new jobs), ETP was making it easier for firms to request state funds to pay for upgrade training that they might otherwise fund themselves.

employment training services to participants in Massachusetts' welfare reform program, ET Choices.

Of all the programs we examined, the state-funded ones tend to be the shortest in duration and the narrowest in focus. Training in these programs typically lasts from one to four months and is concentrated on job skills specific to a particular firm (e.g., fabricating, finishing, and assembling wooden store fixtures; or offset film layout, development, and production).

States vary in their decisions about who will bear the costs of these programs and how they will be financed. A number of states require participating firms to bear some of the training costs, usually in the form of one-to-one fund matching, although program administrators report that firms often spend more. The assumption is that through targeting and the matching requirement, state funds will be leveraged to produce disproportionately great effects.

States can also manipulate the program costs they reimburse to encourage firms to target their training activities. For example, Pennsylvania's Customized Job Training Program provides an incentive for firms to include new hires who are unemployed or disadvantaged or to locate in economically distressed communities by paying 100 percent of their training costs, instead of the 80 percent usually funded by the state.

There is considerable variation in the way programs are financed. The majority receive their funding in annual appropriations from the state legislature. However, programs in three states—California, Delaware, and Rhode Island—are funded through taxes specifically earmarked for training programs. Because federal law prohibits using unemployment tax revenues for job training, that tax in all three states was reduced by 0.1 percent, and a new tax was imposed at the same rate. This arrangement provides California with the best-funded program of any state; similar arrangements generate for the small states of Delaware and Rhode Island funding equal to or greater than that of some larger states that must depend on annual legislative appropriations. Perhaps the most unique arrangement is the mechanism that Iowa uses to fund its New Jobs Training Program. Iowa's community colleges are able to issue up to $18 million a year in tax-exempt bonds to fund training costs. These are then repaid through incremental property taxes (on new equipment, added building value) accrued from businesses where new jobs have been created and through a corporate income tax. The repayment of training costs can take up to ten years, and participating firms' taxes are not increased above what the firms would pay otherwise. Their incremental taxes are simply diverted from the state's general funds to pay for the training costs.

State economic development training programs also interact in very different ways with preexisting JTPA and Perkins-funded programs. Program administrators in several states noted that the state programs were designed as alternatives to the "red tape" and "strings" associated with JTPA and the earlier CETA program. Respondents also talked of the need for their programs to overcome the negative images of government training programs held by members of the business community, based on their perceptions of federally funded programs. One administrator explained why her program has no formal links with JTPA:

> Most firms have not dealt with state government before. Employers associate JTPA with welfare and unemployment, and they think that [the] unemployed are lazy.

However, a number of states maintain both formal and informal links with federally funded programs. For example, Idaho reports using Perkins and JTPA funds wherever possible to extend state funds. Illinois requires applicants to the Industrial Training Program to use federal funds first and outline in a letter the extent of cooperation with JTPA. Indiana targets firms employing at least 25 persons and encourages smaller firms to use JTPA. Delaware administers 75 percent of its Blue Collar Jobs program through the PIC, which also administers JTPA and a variety of other federal programs; it sees the purpose of its program as filling the gaps left by JTPA.

Local Response and Policy Effects

Since state training programs have not typically been evaluated on quantifiable performance measures (e.g., the number of jobs actually created or retained), there is virtually no systematic way of knowing whether or not they have produced their intended effects in local communities. However, our community case studies suggest a few conclusions.

First, these programs are viewed positively in local communities, but they are not seen as a major strategy for either combatting joblessness or upgrading the local workforce. The programs seem to be most important in communities that are aggressively recruiting new firms (e.g., Scranton) or in those where firms, because of their location (e.g., in the heart of the Silicon Valley in California), must continually retrain to remain competitive with overseas firms.

Second, state job training programs are funding sources for more entrepreneurial education and training institutions. This is particularly true of community colleges, which often view these programs as an opportunity to earn additional revenue and to attract firms and employees who will later return for additional training. Secondary institutions tend not to become involved in state-funded training programs, largely because they are not organized to provide short-term, highly customized training. However, there are exceptions. For example, the Clovis school district, near Fresno, California, has provided training under several ETP contracts; it currently administers an ETP contract for a large national construction firm based in San Francisco, and it has recently helped the Fresno ROC/P obtain an ETP contract. Even though ETP contracts are performance-based and the district could potentially lose money, it has always turned a profit. In addition, the ETP contracts have enabled the district to provide its high school students with access to sophisticated, computerized drafting equipment.

Finally, even when firms receive state job training subsidies, they often accord training low priority because of more pressing, short-term demands. In a number of the local communities in our sample, production schedules forced recipient firms to postpone training because they could not afford to take employees off the job to introduce them to new equipment or upgrade their skills. In some states, such as California, firms have had to return money to the state because they were unable to spend it in the allotted time.

Although we have used a common framework to analyze the major federal and state programs that prepare people for jobs not requiring a four-year college degree, we have examined each policy separately. In the concluding section, we compare the five policy areas, summarizing key similarities and differences and suggesting what they imply for the education and training system as a whole and for future policy design.

IV. PATTERNS AND TRENDS IN EDUCATION AND TRAINING POLICIES

This section completes our overview of major education and training policies. We summarize our conclusions on three dimensions our framework has illuminated: similarities and differences across policies, policymakers' efforts to limit slippage during implementation, and trends in the design of education and training policies.

KEY SIMILARITIES AND DIFFERENCES

The major purposes of this study were to examine the range of policy instruments that the federal government and individual states use to provide work-related education and training and to identify the extent of variation across different policies and states. We found that, in one sense, the range is quite narrow. The five policy areas we examined all have inducements as their primary instrument. The policies rely mainly on targeting mandates as their secondary instruments, but they also use capacity-building mechanisms such as program-improvement funds in vocational education and the longer-term training authorized under JOBS. If they were funded adequately, the welfare-to-work programs could rely more heavily on mandates. System-changing instruments have also been used to add new institutions and providers, initially in the federal manpower training programs, and more recently in the state job training programs for economic development.

Despite these fundamental similarities, however, the five policy areas are quite diverse. For example, there are striking contrasts on the issue of costs and which governmental level should bear them. The proportion of program funding borne by the federal government ranges from zero in the case of state job training programs to the dominant role in JTPA, which is essentially a federal program. Yet states and localities even bear some of the JTPA costs when program participants are placed in public institutions such as community colleges. Similarly, the relative influence of state and local governments differs considerably among programs. The state plays a very limited role in JTPA and postsecondary vocational education, whereas in the other three programs, it often determines which services are provided and what outcomes are produced.

Although there is concern in all five policy areas about who the major targets should be, and all are aimed primarily at training for jobs that do not require a bachelor's degree, each focuses on particular segments of the target population. Within the constraints of other curricular requirements, secondary vocational education is available to all students, but a large proportion of federal funding is intended for those most at risk of not completing high school. The targets of postsecondary vocational education are largely self-selected by their own interests and occupational aspirations. JTPA clients are economically disadvantaged, while welfare-to-work clients are typically more disadvantaged and have less recent employment experience. However, the differences between these two groups are decreasing as the welfare system begins to use JTPA as a source of training. Although most of those trained with state economic development funds work in jobs not requiring a baccalaureate degree, the primary targets of these programs are firms, not individual workers.

In addition to differences in policy targets, education and training programs are also distinguished by other key features. Secondary vocational education is increasingly characterized by an emphasis on the services provided. Both the reauthorization of the Perkins Act and a growing number of state policies focus on curricular content and the integration of academic and vocational skills. On the other hand, the most notable aspect of postsecondary vocational education policy is not what educational services are provided, but who provides them. State governance and funding decisions determine what types of institutions (e.g., community colleges, technical institutes, area vocational schools) are authorized and funded to provide postsecondary vocational education. The most significant characteristic of JTPA programs is the performance standards that articulate what they should produce. Welfare-to-work programs are differentiated from other programs primarily by the fact that they are designed to work as mandates if sufficient funding ever becomes available. In addition to the critical differences in their targets, a few state training programs are unique in that they are not administered by the established education and training bureaucracies, and training can be delivered directly by firms themselves.

Policymakers have considerable choice, not only in how they configure basic design elements—policy instruments, targets, costs, providers, and expected outcomes—but also in the amount of discretion they give local implementers. By choosing whether or not to emphasize certain design features, states can determine how much autonomy local agencies have in adapting the policies of higher governmental levels to their own interests and needs. For example, postsecondary vocational programs in Georgia and Pennsylvania have many fundamental characteristics in common, but questions of what should be taught, how it should be taught, and by whom are determined centrally in Georgia, while in Pennsylvania, local priorities dominate.

Within each policy area, there are also great differences among the states, as illustrated by the differences in postsecondary vocational education in Georgia and Pennsylvania. There are similar differences in the extent of state authority and direction in secondary vocational education. JTPA programs differ in their degree of coordination with other education and training programs and in the local institutions that provide services. Similarly, welfare-to-work and state job training programs vary across the states in funding levels and services provided.

Finally, policies rarely remain static, because key elements are modified or their relative emphases are changed. Although the Perkins Act will remain essentially the same program, its recent reauthorization places new importance on the kinds of educational services that are provided and on how the outcomes of those services are measured. Similarly, concern about what services were provided in CETA was transformed in JTPA to an emphasis on program outcomes.

PROMOTING POLICY GOALS AND LIMITING SLIPPAGE

Policymakers have recognized the limits of mandates in programs to prepare individuals for the workforce, particularly in a federalist system where authority and power are shared among governmental levels. They have also acknowledged the need to encourage variation by designing programs that can be adapted to meet the needs of different client populations and labor markets. As a result, education and training policy is dominated by the use of inducements. However, the potential for slippage between policymakers' expecta-

tions and local implementation outcomes is very high, precisely because inducements do encourage variation. Education and training policies, therefore, present a fundamental dilemma: Policymakers must promote the flexibility inherent in inducements to create responsive local programs, while still minimizing the slippage that can result in diverted priorities and inefficient performance. Policymakers typically approach this dilemma by attaching secondary instruments, primarily mandates.

Combining instruments in this way addresses the dual realities of policymaking in a federalist system. Higher levels of government lack sufficient authority, information, and resources to mandate that lower levels of government deliver high-quality services appropriate to local conditions. At the same time, lower levels of government have their own priorities which may not always be compatible with those of the policy initiators above them. As a result, policymakers attach mandates to their inducements, specifying minimum targeting, service, and outcome standards, in an effort to force recipient governments to implement programs consistent with their expectations. In essence, policymakers combine inducement policies with mandates because they recognize the limits of their influence, while simultaneously sending a strong signal that certain minimum standards must be met as a condition of funding.

Not only are mandates attached to inducements in the initial design stages, but later, as problems arise or policymakers decide that slippage is reaching unacceptable levels, additional requirements may be added as a condition of program funding. Consequently, the instruments of education and training policy have become more complex over time, and policymakers have turned to more powerful mandates, such as performance standards. The federal vocational education program and its evolution from the 1963 VEA to the recent reauthorization of the Perkins Act exemplify not only the increasingly specific targeting mandates that reflect policy concern about who is served, but also the inclusion of provisions that give the policymakers more control over the kinds of education provided. Similarly, growing concern about "creaming" in JTPA programs has led to discussions about making the programs' targeting requirements more precise.

The JTPA performance standards represent a major attempt to resolve the dilemma inherent in policies based on inducements. In a sense, they were a reaction to the growing complexity of job training programs that focused primarily on the process by which services were delivered. JTPA sought to maintain local discretion over decisions about who the service providers should be, the mix of services they should provide, and even, to some extent, who should be served. At the same time, it sought to ensure that policymakers' expectations would be realized by imposing performance standards that SDAs must meet. The assumption was that a clear delineation could be made between process and outcomes, thus resolving the dilemma posed by inducement policies. However, this assumption may ultimately prove false. Studies by the GAO and others suggest that federal officials may have underestimated the effects of performance standards on program operations. These standards influence not only who is served, but also the types of services provided and the conditions under which local institutions provide those services (e.g., through the use of performance contracts that transfer the risks associated with performance standards from SDAs to providers). To meet the standards, SDAs skew their behavior in particular ways. Although the standards are not the only factors shaping SDA actions, they can bias choices in favor of clients and services that have the greatest likelihood of meeting the standards. In some cases, these choices may lead to high-quality services appropriate to clients' long-term needs, but in others, the need to meet short-term objectives may override concerns about quality and appropriateness.

By their very nature, inducements emphasize short-term production and assume that policy targets have the capacity to produce the desired services and outcomes. This assumption can also lead to slippage, not so much because local implementers disagree with policymakers' goals, but because they lack the capacity to meet those expectations. Yet, as we argued earlier, policymakers are often reluctant to use capacity-building instruments because of their low visibility and uncertain payoff. The Perkins Act has always paid attention to capacity-building by stipulating that almost one-half of the basic grant be used for program improvement. In addition, secondary and postsecondary vocational education, designed and implemented by states and localities, provides programs of the longest duration and attempts to impart both vocational and academic skills. The state job training programs seek to increase firms' capacity to operate profitably, although the training provided is short-term and typically covers a narrow range of job-specific skills. The emphasis on short-term production is most evident in JTPA.

In contrast, welfare-to-work programs, which serve some of the same clients as JTPA, attach greater importance to long-term capacity-building and emphasize basic skills training. However, federal and state fiscal constraints are likely to cause longer-term education and training to become more limited as the JOBS program enrolls more clients. Nevertheless, JOBS has the opportunity to learn the lessons of JTPA before it establishes performance standards in 1995. Slippage from policymakers' initial expectations is due not only to inadequate or ineffectual mandates being attached to inducement-based policies, but also to the inability of local implementers and their clients to meet those expectations. To remedy this problem, the targeting mandates and performance indicators selected must create incentives for appropriate services, and where necessary, capacity-building instruments should also be used to enhance local resources and expertise.

TRENDS IN POLICY DESIGN

Growing complexity of policies and reliance on stronger instruments is a major trend in the design of education and training policies. Another important trend is the shifting balance between federal and state policy initiatives. Since the 1960s, the most important policy innovations in work-related education and training have come from Washington. Yet over the past decade, the role of the states in creating their own programs, in interpreting federal regulations, and in shaping local programs has grown significantly. Even relatively new federal programs, such as JOBS, have been influenced by the experience of states that have experimented with more comprehensive approaches to preparing welfare recipients for employment. The growing state presence in education and training can be attributed largely to reduced federal funding and policy activism during the 1980s, increased interest in state economic development, political pressure on state officials to improve the quality of public education, and greater fiscal and expert capacity in state governments.

There is every reason to believe that the states will continue to play a prominent role in education and training policy, and this has several implications for future policy. Because states have greater leverage than the federal government over localities, policy emanating from the state level can be more directive and can rely more heavily on mandates. States have historically shown a greater interest in serving all citizens and less concern about the special populations that have been the targets of federal policies. While this traditional ideology suggests that future policy may place less emphasis on targeting, the economic devel-

opment goals of many states may not be effectively met unless education and training programs adequately serve the minorities, women, and immigrants who constitute the bulk of the future workforce. Finally, if states play a more substantial role, there is likely to be greater variation in education and training policies. Factors such as funding levels, who bears program costs, what services are provided and by whom, and the amount of local discretion will vary more significantly if states have more policy involvement than if the federal government is the creator and primary implementer of the programs.

A second major trend is the proliferation of education and training programs. We have examined five different program areas, all of which prepare workers for jobs that do not require a baccalaureate degree. In addition, there are many other, smaller programs—for example, in California, federal and state funds support 22 different education and training programs administered by 12 different state agencies (Rudman and Meredith, 1990). One of the most important causes of this proliferation has been dissatisfaction with existing education and training programs. The establishment of manpower training programs outside the schools in the early 1960s occurred in part because of dissatisfaction with secondary vocational programs, and the expansion of training as an alternative to vocational education has continued to rely on rhetoric about the rigidity and ineffectiveness of vocational education. Many of the state-funded job training programs begun in the early 1980s were efforts to replace CETA—then widely regarded as ineffective—with training that would be more flexible and responsive to employers.

Another cause of proliferation is the policymakers' efforts to respond to different groups of students or clients. The discovery of new clients unserved by existing programs has generally led to new programs specifically designed for them, rather than efforts to incorporate the clients into existing programs. However, there are some important exceptions to this pattern: Federal legislation for vocational education since 1963 has been designed to include more disadvantaged individuals in vocational programs; also, the definitions of groups considered disadvantaged have expanded, and the earmarking of funds for specific groups has become increasingly specific. Nonetheless, the need to fit programs to the needs and capacities of distinct population groups has been important in the expansion of the education and training system.[1]

The proliferation of education and training programs has generated a series of problems. The variety of programs makes it far more difficult to understand the larger system. Among legislators, the range of programs also generates fears about duplication and waste, and these fears in turn lead to efforts (many of them unsuccessful) to coordinate programs. Although concern about duplication and waste is the dominant perspective, many argue that multiple programs provide more points of entry into the education and training system. Still others have suggested that multiple programs create a healthy competition, with work-related programs vying for clients and public support and providing a rich array from which individuals and policymakers can choose. While competition is actually quite limited because of eligibility restrictions, the inadequacy of public funding, and other barriers to entry such as location, this metaphor provides a very different perspective on program proliferation.

[1]New programs are often instituted for particular populations because the services needed vary. For example, JTPA and welfare programs provide many more support services than does vocational education, e.g., child care and transportation; and JTPA and welfare programs place much greater emphasis on work experience, job search assistance, remedial education, and assistance in job placement than on classroom training in occupationally specific skills.

The potential consequences of proliferation point to another major trend. Although education and training has been characterized by fragmentation, there is some evidence of increasing coordination at the local service delivery level. Our eight community case studies indicate that even though education and training policies have proliferated at the policy initiation stage, the local institutions that implement them are typically not as fragmented. New programs have not resulted in a proliferation of education and training institutions. Rather, existing institutions have assumed the new responsibilities, and where feasible, they have integrated services across programs (e.g., welfare-to-work clients may attend occupational training classes with traditional vocational education students in a community college or area vocational school). By no means are all programs coordinated, but the most effective local institutions have integrated them more than their fragmented policy origins would lead one to expect. In addition, local institutions tend not to duplicate each other's functions, even in the face of new inducements such as welfare-to-work programs.[2]

The inclination of local institutions to avoid the costs and uncertainties associated with competition in the relatively constrained market for new clients is now being reinforced by state actions that seek to use limited public resources more cost-effectively. The mandated use of half the state's 8 percent JTPA coordination funds for GAIN clients in California, the designation of SDAs as the primary local implementers of JOBS in Pennsylvania, and the use of state job training funds to fill gaps left by JTPA are all examples of a trend toward greater coordination of education and training programs.

Like the tension between encouraging adaptation to local conditions and maintaining the integrity of broad policy goals, program proliferation and attempts to mitigate its effects through formal and informal coordination will continue. Policymakers' electoral and constituent incentives propel them toward creating new programs, even when fiscal and other constraints may make those programs no more than symbolic responses. In addition, it is not clear that a design choice in favor of expanded targeting or more precise service requirements is always better than establishing an entirely new program.

CONCLUSIONS

Future generations of education and training policies are not likely to differ significantly from the current array. They will essentially rely on inducements to promote the policy objectives of higher levels of government in local communities, but they are also likely to encompass a broader range of secondary instruments. Policymakers, particularly at the state level, will continue to be concerned about questions of what services should be provided and who should provide them. The growing emphasis on accountability in all aspects of American life, from the on-time departures of airlines to hospital mortality rates, is likely to make performance standards an increasingly prominent feature of education and training policies. As the case of JTPA has already demonstrated, however, a mandate calling for prescribed levels of performance does not necessarily ensure that policies will meet policymakers' expectations either for who should be served or for overall service quality and appropriateness. As a result, the challenge for future policy design will not be to craft a single instrument intended to eliminate slippage on a few narrowly defined measures such as program cost and short-term job placement, but to combine a variety of instruments in ways

[2]For an extended discussion of the ways in which local institutions coordinate their services and the factors influencing the level of coordination, see Grubb and McDonnell, 1991.

that will create incentives for local education and training institutions to advance the goals of preparing individuals for productive employment—including widespread accessibility of services and the acquisition of skills that enhance long-term job opportunities.

Appendix
DATA SOURCES

TELEPHONE INTERVIEWS WITH STATE-LEVEL RESPONDENTS

Between January and December 1990, state-level administrators of secondary and postsecondary vocational education, JTPA, welfare-to-work, and state-funded job training programs were interviewed in all fifty states. In addition, governors' education aides or state legislative staff were interviewed about each state's broader education policy agenda, and staff in each governor's office or state department of commerce were interviewed about the condition of the state's economy and its economic development strategies. Because the major focus of the survey was vocational education, staff responsible for secondary and postsecondary vocational curriculum, teacher policy, and data collection were also interviewed.

Depending on the size and complexity of the state government, fifteen to twenty respondents were interviewed. Interviews averaged about 30 minutes, ranging from 15 to 90 minutes. Interviewers used a structured interview guide, but asked respondents for open-ended answers.[1] These were recorded and configured in a computerized database that enables researchers to access responses systematically by individual states and role positions.

For both secondary and postsecondary levels, the interviews covered the basic institutional structure of the state's vocational education system; its governance structure; any state policies delineating responsibilities among different types of institutions; funding mechanisms and fiscal policies (including the use of federal funds); teacher certification and other policies related to teacher training and compensation; state program review, curriculum, and evaluation policies; and state policies dealing with data collection, student assessment, and technical assistance. Interviews with the state director of vocational education and the governor's aide or legislative staffer in each state also explored the effect of other state education policies on vocational education and on the extent of state influence over local funding and curriculum decisions.

For state-funded job training programs, welfare-to-work programs, and JTPA, we typically interviewed the state official in charge of the program. (In some states with multiple job training programs, such as Illinois and Massachusetts, this involved interviews with several administrators.) The interviews with JTPA officials concentrated on state interpretations of federal legislation, including the choice of performance standards, the establishment of priorities, and the use of 6 percent incentive funds and 8 percent coordination funds. We also asked about any state policies in addition to the federal requirements, especially those relating to coordination, evaluation and data reporting, and supplemental state funding. Because of the growing links between JTPA and JOBS, we also explored the extent of formal and informal coordination between the two programs. The interviews with officials of state-funded job training programs and welfare-to-work programs concentrated on:

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[1]Between January and September 1989, we collected each state's extant documents on vocational education programs (e.g., the plan the state submits to the federal government to obtain Perkins funds, internal planning documents, budgets, curriculum guides, teacher certification requirements, etc.). In our subsequent interviews with state officials, we were able simply to verify and update most of the quantitative information.

- The problems policymakers saw themselves addressing when they established a program; the key actors in the program's development and enactment; and the policymakers' expectations for the program.
- The way the program operates: its beneficiaries, its funding level and allocation mechanism, its administrative structure, and whether or not it is coordinated with other job training programs.
- Perceptions of the extent to which the program has met its goals, any major problems it has encountered, and the kinds of data available about either its operations or its effects.

COMMUNITY CASE STUDIES

In selecting our sample of local communities, we first chose four states that were geographically dispersed and that varied in both the extent of state control over local institutions and the types of state programs that had been implemented. In selecting communities within states, we chose one relatively large city (San Jose, Des Moines, Miami, and Philadelphia) and one small- to medium-sized community (Fresno, Sioux City, Jacksonville, and Scranton), because we assumed that the scale of the communities might affect the interactions among education and training institutions. We also tried to identify communities with clearly bounded labor markets to facilitate assessing the appropriateness of training opportunities, given the nature of labor market demand. Our eight case-study communities also vary in their demographic and industrial composition: Miami, Fresno, and San Jose have large numbers of immigrants, while the Iowa and Pennsylvania communities have relatively few; five communities have sizable minority populations, while Scranton, Jacksonville, and Sioux City are overwhelmingly white. Fresno and Sioux City have agricultural bases; San Jose has a great deal of high-technology design and manufacturing; Miami depends heavily on financial services and tourism; Philadelphia has a heavy concentration of insurance and financial services; Scranton and Jacksonville are shifting away from maufacturing to a greater concentration on retail and financial support services.

Data collection for the eight community case studies was conducted between November 1989 and February 1990. Each site visit lasted from four to eight person-days—enough time to obtain a relatively clear picture of the types of institutions providing work-related education and training and the interactions among them, although not enough time to examine each institution in great detail.

In each community, we interviewed principals, counselors, and teachers involved in secondary vocational education; administrators and instructors at community colleges and regional vocational-technical facilities; JTPA administrators and providers; welfare administrators; and a small sample of employers who either received publicly funded job training services or are major employers of persons trained in local institutions. In each community, we also interviewed someone who could provide an overview of the local labor market and the role of each training institution in preparing workers for that market (e.g., staff from the local economic development agency, representatives of the Chamber of Commerce or business-education group). These structured, but open-ended, interviews averaged between 45 and 90 minutes.

Our overriding purpose in all the interviews was to learn how different types of local communities and labor markets organize education and training services, and how they re-

spond to federal and state policies. Individual interviews focused on the specifics of the education and training programs offered—enrollment levels and composition, funding sources, types of services, and the nature of the data collected on program performance. We also explored the effects of particular federal and state policies on local program offerings and the kinds of students who enroll in them. Another series of questions addressed the formal and informal relationships that local institutions have formed, the extent of competition among the institutions, incentives and barriers to coordination, and whether formal or informal divisions of labor had been established among the institutions.

REFERENCES

Barro, S. (1989). *Federal goals and policy instruments in vocational education*. Washington, DC: SMB Associates.

Bennett, W. J. (1988). *American education: Making it work.* Washington, DC: U.S. Department of Education.

Brint, S., & Karabel, J. (1989). *The diverted dream: Community colleges and the promise of educational opportunity in America, 1900–1985.* New York: Oxford University Press.

California Health and Welfare Agency (1988). *GAIN monthly activity report and GAIN quarterly characteristics report.* Sacramento, CA: Department of Social Services.

California Legislative Analyst (1985). *Job search, training, and work experience: The lessons for California from eight evaluations of the work incentive program.* Sacramento, CA.

Carnevale, A. P., & Gainer, L. J. (1988). *The learning enterprise.* Washington, DC: U.S. Department of Labor, Employment and Training Administration.

Clune, W. H. (1987). Institutional choice as a theoretical framework for research on educational policy. *Education Evaluation and Policy Analysis, 9*(2), 117–132.

Clune, W. H., White, P., & Patterson, J. (1989). *The implementation and effects of high school graduation requirements: First steps toward curricular reform.* Brunswick, NJ: Center for Policy Research in Education.

Creticos, P. A., & Sheets, R. G. (1988). *State-financed, workplace-based retraining programs.* Washington, DC: National Commission for Employment Policy and the National Governors' Association.

Dickinson, K. P., West, R. W., Kogan, D. J., Drury, D. A., Franks, M. S., Schlictmann, L., & Vencill, M. (1988). *Evaluation of the effects of JTPA performance standards on clients, services, and costs.* Washington, DC: National Commission for Employment Policy.

Dickinson, N. (1986, July–August). Which welfare work strategies work? *Social Work.*

Elmore, R. F. (1987). Instruments and strategy in public policy. *Policy Studies Review, 7*(1), 174–186.

Finkel, M., Kulik, J., & Paulin, H. (1990). *Final report of the single point of contact program evaluation.* Cambridge, MA: Abt Associates, Inc.

Fosler, R. S. (Ed.) (1988). *The new economic role of American states: Strategies in a competitive world economy.* New York: Oxford University Press.

Friedlander, D., & Goldman, B. (1988). *For whom are welfare employment programs most effective?* Paper prepared for the Tenth Annual Research Conference of the Association for Public Policy Analysis and Management (APPAM), Seattle.

Friedlander, D., & Long, D. (1987). *A study of performance measures and subgroup impacts in welfare employment programs.* Manpower Development Research Corporation.

Ganzglass, E., & Heidkamp, M. (n.d.). *State strategies to train a competitive workforce: The emerging role of state-funded job training programs.* Washington, DC: National Governors' Association.

Goodwin, D. (1989). *Postsecondary vocational education. Final report, volume IV.* Washington, DC: National Assessment of Vocational Education, United States Department of Education.

Gramlich, E. M. (1977). Intergovernmental grants: A review of the empirical literature. In W. E. Oates (Ed.), *The political economy of fiscal federalism*. Lexington, MA: Lexington Books.

Grubb, W. N. (1989). Drop-outs, spells of time, and credit in postsecondary education: Evidence from longitudinal surveys. *Economics of Education Review, 8*(1), 49–67.

——— (1984). The bandwagon once more: Vocational preparation for high tech occupations. *Harvard Educational Review, 54*(4): 429–451.

Grubb, W. N., Brown, C., Kaufman, P., & Lederer, J. (1989). *Innovation versus turf: Coordination between vocational education and Job Training Partnership Act Programs*. Berkeley, CA: National Center for Research in Vocational Education.

Grubb, W. N., & McDonnell, L.M. (1991). *Work-related education and training in local communities: Diversity, interdependence, and effectiveness*. National Center for Research in Vocational Education. Santa Monica, CA: RAND.

Grubb, W. N., & Stern, D. (1988). *Long time a'comin': Federal options for financing postsecondary vocational education*. MPR Associates for the National Assessment of Vocational Education.

Gueron, J. M. (1988). State welfare employment initiatives: Lessons from the 1980s. *Focus, 11*(Spring), 17–24.

——— (1987). *Reforming welfare with work*. Occasional Paper No. 2, Ford Foundation Project on Social Welfare and the American Future.

Hanson, T. L. (1989). *Curricular change in Dade County 1982–83 to 1986–87: A replication of the PACE study*. Brunswick, NJ: Center for Policy Research in Education.

Hoachlander, E. G. (1987). *The federal role in vocational education. Design papers for the national assessment of vocational education*. Washington, DC: United States Department of Education.

Kosterlitz, J. (1989). Devil in the details. *National Journal, 21*(48), 2942–2946.

Kulik, J., Frees, J. W., & Winer, E. (1988). *First report on the implementation of the single point of contact demonstration*. Cambridge, MA: Abt Associates, Inc.

Levitan, S. A., & Gallo, F. (1988). *A second chance: Training for jobs*. Kalamazoo, MI: W. E. Upjohn.

Levitan, S., & Mangum, G. (1969). *Federal training and work programs in the sixties*. Ann Arbor, MI: Institute of Labor and Industrial Relations, University of Michigan.

Manpower Demonstration Research Corporation (n.d.). *GAIN executive summary*. New York, NY.

MASSJOBS Council (1987). *Massachusetts training and employment system: A report to the legislature by the cabinet-level education and employment coordinating council*. Boston.

McCubbins, M. D., Noll, R. G., & Weingast, B. R. (1987). *Administrative procedures as instruments of political control*. Prepared for presentation at the 1987 meeting of the MidWest Political Science Association, Chicago.

McDonnell, L. M. (1988a). *Policy design as instrument design*. Paper presented at the 1988 Annual Meeting of the American Political Science Association, Washington, DC.

——— (1988b). *Coursework policy in five states and its implications for indicator development*. Working paper.

McDonnell, L. M., & Elmore, R. F. (1987). Getting the job done: Alternative policy instruments. *Education Evaluation and Policy Analysis, 9*(2), 133–152.

McDonnell, L. M., & McLaughlin, M. W. (1982). *Education policy and the role of the states.* Santa Monica, CA: RAND.

Moe, T. M. (1984). The new economics of organization. *American Journal of Political Science, 28*(4), 738–777.

Moore, R. W., Wilms, W. W., & Bolus, R. E. (1988). *Training for change: An analysis of the outcomes of California Employment Training Panel programs.* Sacramento, CA: Employment Training Panel.

Muraskin, L. D. (1989). *Final report volume II: Implementation of the Perkins Act.* Washington, DC: National Assessment of Vocational Education, United States Department of Education.

National Academy of Sciences (1975). *Knowledge and policy in manpower.* Washington, DC: National Research Council, National Academy of Sciences.

National Alliance of Business and the National Association of State Development Agencies (1986). *Making the link: Coordinating economic development and employment and training.* Washington, DC.

National Commission for Employment Policy (1988). *Evaluation on the effects of JTPA performance standards on clients, services, and costs.* Washington, DC.

Osborne, D. (1988). *Laboratories of democracy.* Boston, MA: Harvard Business School Press.

Paddock, R. C. (1988, January 12). Governor's budget would scale back workfare plan. *The Los Angeles Times,* p. 1.

Panel of Consultants on Vocational Education (1963). *Education for a changing world of work.* Washington, DC: United States Department of Health, Education and Welfare.

Pressman, J. L., & Wildavsky, A. (1984). *Implementation.* 3rd ed. Berkeley, CA: University of California Press.

Rheault, K. (1988). *A report of vocational education funding support provided by states.* Carson City, NV: Nevada Department of Education.

Riccio, J., Goldman, B., Hamilton, G., Martinson, K., & Orenstein, A. (1989). *GAIN: Early implementation experiences and lessons. California's Greater Avenues for Independence Program.* New York: Manpower Demonstration Research Corporation.

Rudman, C. J., & Meredith, Jr., C. M. (1990). *Ready or not, here we come: Training California's emerging workforce.* Sacramento, CA: Assembly Office of Research.

Sabatier, P., & Mazmanian, D. (1980). The conditions of effective implementation. *Policy Analysis,* 5(Fall), 481–504.

——— (1979). A framework of analysis. *Policy Studies Journal, 8,* 538–560.

Shuit, D. P. (1990, March 20). Budget cuts threaten to undermine GAIN. *The Los Angeles Times.* pp. 3, 28.

Stevens, D. W. (1989). *The role of vocational education in Missouri's economic development: What can we learn from other states?* Jefferson City, MO: Missouri State Council on Vocational Education, 1989.

——— (1986). *State industry-specific training programs: 1986.* Columbia, MO: University of Missouri.

Taggart, R. (1981). *A fisherman's guide: An assessment of training and remediation strategies.* Kalamazoo, MI: W. E. Upjohn Institute for Employment Research.

United States Congress, Office of Technology Assessment (1989). *Performance standards for secondary school vocational education: Background paper.* Washington, DC: Science, Education, and Transportation Program.

United States Department of Education (1988a). *First interim report from the National Assessment of Vocational Education.* Washington, DC.

——— (1988b). *Second interim report from the National Assessment of Vocational Education.* Washington, DC.

United States General Accounting Office (GAO) (1989). *Job Training Partnership Act: Services and outcomes for participants with differing needs.* Washington, DC.

——— (1989). *Training programs: Information on fiscal years 1989 and 1990 appropriations.* Washington, DC.

——— (1988). *Work and welfare: Analysis of AFDC employment programs in four states.* Washington, DC.

——— (1987). *Work and welfare: Current AFDC work programs and implications for federal policy.* Washington, DC.

United States House of Representatives, Committee on Labor and Human Resources (1989). *Carl D. Perkins Vocational Education Act Amendments of 1989* (Report 101–221). Washington, DC: U.S. Government Printing Office.

United States Senate, Committee on Education and Labor (1989). *Applied Technology Education Amendments of 1989* (Report 101-41). Washington, DC: U.S. Government Printing Office.

Van Meter, D., & Van Horn, C. (1975). The policy implementation process: A conceptual framework. *Administration and Society, 6*(February), 445–488.

Victor, K. (1990). Helping the haves. *National Journal, 22*(15), 898–902.

Wirt, J. G., Muraskin, L. D., Goodwin, D. A., & Meyer, R. H. (1989). *Final report volume I: Summary of findings and recommendations.* Washington, DC: National Assessment of Vocational Education, United States Department of Education.